A QUALITATIVE INQUIRY INTO INDONESIAN WOMEN'S BREASTFEEDING DECISION-MAKING

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DEDICATION

I dedicate this dissertation to my mom. Even though her body left this world just weeks before starting my doctoral work, her spirit and support surround me daily. While she has been unable to encourage me in person along this academic journey, she has always supported my dreams. I first learned of the importance of breastfeeding from my mother long before I had my own child, and she continues to inspire my parenting and my research.

> Many times I've wondered how much there is to know.
> Many dreams come true, and some have silver linings.
> I live for my dream and a pocketful of gold.
> Over the Hills and Far Away, Led Zeppelin

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A QUALITATIVE INQUIRY INTO INDONESIAN WOMEN'S BREASTFEEDING DECISION-MAKING

Despite the World Health Organization's longstanding guidelines encouraging exclusive breastfeeding, less than half of babies are breastfed exclusively in Indonesia, a country experiencing a disproportionately high infant mortality rate believed to be related to inadequate access to clean water and health care. Questions remain concerning women's decision-making about infant feeding, and we know very little about Indonesian women's decisions and behaviors regarding breastfeeding. The current research explored Indonesian women's perceptions about their communication with their support persons as they contemplated the best and most appropriate way to feed their infants. During two trips to Indonesia in 2018, semi-structured qualitative interviews and focus groups were conducted with 84 mothers and 36 breastfeeding support persons including spouses, their infants' grandmothers, midwives, and lactation consultants on Java, Bali, and Flores Islands. Using the constant comparative method, results revealed infants' grandmothers and fathers as primary sources of breastfeeding support for mothers. Notably, despite their prominence, grandmothers and fathers were not always perceived to be effective sources of support; rather, mothers often described experiencing support that was unwanted or ineffective. Commonly mothers described a grandmother's attempted support as being couched in criticism or guided by myths, and a father's ineffective support as the result of lack of knowledge. Conflict with grandmothers was especially problematic given cultural expectations regarding elders. Findings are discussed in the context of Problematic Integration Theory, a general theory that describes the role of communication in experiencing and managing tensions between expectations and desires. Specifically, findings revealed that breastfeeding challenges fundamentally involve negotiating these dilemmas, which are co-created,

exacerbated, transformed, and managed through communication between mothers and their support persons. This study demonstrates the centrality of communication in breastfeeding decision-making, highlights the role of grandmothers and fathers in breastfeeding promotion, and emphasizes the importance of informed social support for new mothers.

Marianne Sassi Matthias, PhD, Chair

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AAP:	American Academy of Pediatrics
AIMI:	Association of Breastfeeding Mothers in Indonesia (Asosiasi Ibu Menyusui Indonesia)
BFHI:	Baby-friendly Hospital Initiative
CIA:	Central Intelligence Agency
EBF:	Exclusive Breastfeeding
FAO:	Food and Agriculture Organization of the United Nations
HHS:	U.S. Department of Health and Human Services
IBFAN:	International Baby Food Action Network
SH:	Sri Handayani, local research counterpart
UNICEF:	The United Nations Children's Fund
WHO:	World Health Organization

Chapter One: Introduction

Exclusive breastfeeding (EBF) is one of the World Health Organization's (WHO) top nutrition targets for 2025 (Shetty, 2014). Breastfeeding provides "essential irreplaceable nutrition" and is considered to be the single most impactful intervention on child survival (Food and Agriculture Organization of the United Nations [FAO], 2017, p. 21). Breastfeeding goes hand-in-hand with the United Nations (UN) Sustainable Development Goals (SDGs), targeting eight of the 17 globally universal goals containing 169 target outcomes for 2030 (United Nations International Children's Emergency Fund [UNICEF], 2016, 2017). WHO guidelines have stated since 2001 that babies should be exclusively breastfed for the first six months, yet EBF rates remain relatively low around the world (Shetty, 2014). EBF rates have increased globally from 36% in 2005 to 43% in 2016, with the highest rates (59%) occurring in Southern Asia (FAO, 2017).

In 2009, the federal Indonesian government enacted the strictest breastfeeding law in the world, requiring every baby to receive breastmilk exclusively until they are six months old, unless medically indicated otherwise (Shetty, 2014; Williams, 2013). The EBF rate in Indonesia increased 10% during the seven years following the policy's enactment, reaching 42% in 2016, but the most recent rate is only marginally better than 40% in 2003 (Shetty, 2014). The reality does not reflect much difference from a 1991 report of the Indonesia Demographic Health Survey stating that EBF rates were quite low despite all babies getting some breastmilk (FAO, 2017; Suharyono & Matulessy, 1997).

The Importance of Breastfeeding

The benefits of breastfeeding touch every aspect of society including the government, the economy, and the environment. Hansen (2016) of the World Bank noted that, "breastfeeding is a child's first inoculation against death, disease, and poverty, but also their most enduring investment in physical, cognitive, and social

capacity" (para. 1). Because increasing the rate of EBF will directly reduce child malnutrition, the World Health Assembly has endorsed a global goal of increasing EBF by 50% during the first six months (FAO, 2017). The UN Sustainable Development Goals 2 and 3 focus on ending hunger and improving health and well-being, and breastmilk is a vital source of nutrition that can save lives and contribute to improving health outcomes (UNICEF, 2016). The UN's Food and Agriculture Organization (2017) identifies EBF during the first six months of life as the most effective way to improve nutrition for children during the first 1,000 days of life (from conception to two years old), an especially formative timeframe in human development. Breastmilk also provides antibodies, lipids, and other nutritional elements that protect babies against diarrhea, ear infections, and pneumonia (Shetty, 2014).

The benefits of breastfeeding for mothers are extensively documented as well. The U.S. Department of Health and Human Services (HHS) (2017) indicates that breastfeeding leads to a lower risk of type 2 diabetes, breast cancer, ovarian cancer, and rheumatoid arthritis, as well as cardiovascular diseases related to postpartum weight retention among mothers. Breastfeeding also promotes postpartum uterine health and decreases likelihood of developing iron-deficiency anemia (FAO, 2017). Currently, experts are unified on the biophysical benefits of breastfeeding for the mother (HHS, 2017; FAO, 2017). The effects of the costs of not breastfeeding are equally as staggering.

In a recent analysis of costs associated with not breastfeeding in seven Southeast Asian countries, the damages were classified into two categories: human (maternal and infant mortality, and reduced cognition), and economic (less productive workforce as a result of reduced cognition, and treatment costs for diarrhea and pneumonia among infants) (Walters et al., 2016). WHO Child Growth Standards serve as an internationally used baseline for growth rate assessments, and stunting occurs

when children are too short for their age. Stunting is a common outcome of chronic undernutrition among children who are not exclusively breastfed for the first six months (FAO, 2017). Stunting results in intellectual disabilities, which include a child's compromised ability to learn, limited emotional resources to cope with stress and trauma, and a lack of adaptive behaviors to manage day-to-day stressors and negotiate social interactions (FAO, 2017; HHS, 2013). When stunting occurs, children are at a higher risk of illness and learning disabilities, which eventually affects workforce productivity, income-earning potential, and social skills in adulthood (FAO, 2017). Mental health problems may also increase as a result of stunting and subsequent intellectual disabilities, taking a toll on both the human and economic potential of the country. The consequences of malnutrition and stunting extend beyond the individual level, dragging down the economic development potential of communities and entire nations.

The UN Sustainable Development Goals 1, 8, and 10 focus on ending poverty, reducing inequalities, and promoting economic growth (UNICEF, 2016). The measure of predicted economic benefits of improving breastfeeding rates worldwide can only be quantified by the costs of not breastfeeding a child. Based on data collected in 2012 from 96 countries, an analysis of the economic benefits of improved cognition determined that annual losses amount to US $70.9 billion in low and middle-income countries, and US $302 billion worldwide, which is argued to be returned to the annual world economy as a result of EBF (Rollins et al., 2016). These losses are argued to be from cognitive deficits associated with regional infant malnutrition compared with every infant breastfed until at least six months of age (Rollins et al., 2016). EBF not only improves health for women and children and lowers health care costs for families and societies, but it also reduces waste and increases sustainable consumption (UNICEF, 2016, 2017).

Beyond the general inherent benefits of breastmilk and relative risks associated with formula milk, unhygienic conditions prevalent in developing countries may lead to potentially fatal digestive illnesses (Shetty, 2014). With the increasing focus on global health equity, efforts to promote breastfeeding are thought of as the most cost-effective and promising way to improve child health (Roberts et al., 2013). A senior program manager for Save the Children argued that persuading women to breastfeed is more effective at saving lives than efforts to improve sanitation (Williams, 2013). To this end, in this research I explored how mothers in Indonesia make decisions about breastfeeding. Findings from this research will help to inform efforts to improve breastfeeding promotion efforts. The following section highlights the breastfeeding context in Indonesia.

The Breastfeeding Problem in Indonesia

Indonesia presents a unique setting that frames breastfeeding as a public health priority as opposed to an individual lifestyle choice. Limited access to health care and sanitary conditions is prevalent in many low and middle-income countries, but Indonesia's regionally disproportionate prevalence of infant death from digestive illnesses and malnutrition presents a prime context for exploring decision-making related to EBF.

Improvements to infrastructure over the past decade are vast, but some of the poorest rural Indonesians are still being left behind. In 2017, 25% of Indonesians still had no access to an improved source of drinking water[1] (Statistics Indonesia, 2018). With no clean water, no kitchen, no money to buy the gas needed to boil water, and no private restroom, having clean hands, utensils, and bottles is a "pipe dream" for women in

[1] Improved sources of drinking water include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and spring, and rainwater (Statistics Indonesia, 2018).

extreme poverty (Williams, 2013, para. 4). These unsanitary conditions are especially prominent during times following natural disasters, and Indonesia is one of the most disaster-prone countries in the world with a high risk for earthquakes, tsunamis, volcanic eruptions, floods, landslides, drought and forest fires (National Institute of Disaster Management, 2014). In the wake of natural disasters, even the most resourced families may face challenges maintaining hygienic practices for infant feeding. Indonesia alone accounts for nearly half of Southeast Asia's child deaths from diarrhea and pneumonia primarily attributed to inadequate breastfeeding, and recent research by the University of Padjajaran revealed that 5,377 Indonesian children's lives could be saved every year with improved breastfeeding rates (Walters et al., 2016). According to the most recent statistics, Indonesia's infant mortality rate has improved dramatically at 21 per 1,000 in 2018, which is alarmingly disproportionate to the rate in the East Asia/Pacific region at 12.5 per 1,000 (The UN Inter-agency Group for Child Mortality Estimation, 2019).

The costs of not breastfeeding in Indonesia are dire, and a recent report declared that the country would save 20 trillion Rupiah (US $1.49 billion) each year in health costs (15% of savings) and wages (85% of savings) if children were breastfed according to WHO recommendations (Shetty, 2014). The Food and Agriculture Organization of the United Nations (2017) refers to the stunting indicator, and 36.4% of children under five years old in Indonesia suffered from stunting in 2016. In comparison, the 2016 global prevalence for stunting is 22.9%, 13.5% in the Eastern Asia and South-Eastern Asia region, and 2.1% in the United States (FAO, 2017). Recent findings (Lestari et al., 2018) confirm the relationship between non-exclusive breastfeeding during the first six months and stunting in Indonesian children ages two to five. Inadequate breastfeeding has led to more than US $1.3 billion in costs associated with intellectual disabilities, and US $256 million in health care expenses annually in Indonesia (Walters et al., 2016). It is also believed that more than 1,200 Indonesian mothers' deaths have been averted annually

by the benefits of breastfeeding, and 803 women in Indonesia could live longer annually if the breastfeeding rate increased to 90% for the first two years of life (Walters et al., 2016). The above statistics characterize an extreme example in the global context, and these problems will continue to proliferate without effective breastfeeding promotion efforts, an area in which Indonesia has a history of falling short.

Ineffective Policies

Indonesia's first official promotion of breastfeeding was enacted in 1974 when the president released a Presidential Instruction on Community Nutrition Improvement (Suharyono & Matulessy, 1997). The National Commission on Breastfeeding was founded in 1977 to coordinate a national program promoting breastfeeding across Indonesia, and was seen as influential in increasing breastfeeding duration among non-educated women (Joesoef et al., 1989). One of the most commonly accepted interventions to effectively promote breastfeeding worldwide is UNICEF's and WHO's Baby-friendly Hospital Initiative, which encourages immediate mother-baby physical bonding after birth and follows a rooming-in protocol while the mother and baby are in the hospital recovering from birth, in addition to staff training, community outreach, and prohibition of formula samples and feeding accessories (International Breastfeeding Action Network [IBFAN], 2012). In a study using data from Riskesdas, a community-based survey on health in Indonesia across all 33 provinces and 497 districts or cities, timely initiation of breastfeeding was found to be significantly related to exclusive breastfeeding (Paramashanti et al., 2016).

While baby-friendly hospitals have been claimed to be in place in Indonesia since 1980, 19 years before WHO's Baby-friendly Hospital Initiative criteria were released (IBFAN, 2012; Suharyono & Matulessy, 1997), the 2008 World Breastfeeding Trend Report disputed this claim (Februhartanty et al., 2012). Furthermore, the International Breastfeeding Action Network reported that Indonesia is tied with four countries in Africa

scoring 0/10 on adherence to WHO Baby-friendly Hospital Initiative criteria. In 2013, only 34% of babies were breastfed within one hour after birth, one of the practices mandated in a baby-friendly hospital (IBFAN, 2015). Indonesia earned a 2/10 score, the lowest rating among 51 countries, for implementation of the International Code of Marketing of Breastmilk Substitutes, which institutes guidelines for formula marketing and adequate information on its proper use, enacted by the World Health Assembly in 1981 (IBFAN, 2012). Two-thirds of profit growth for formula companies came from Asia-Pacific in 2013, where Indonesia accounted for US $1.1 billion (Williams, 2013). In the same 2012 global report, Indonesia ranked 48th on the 10 areas of action for measuring success in promoting breastfeeding as identified by the World Breastfeeding Trends Initiative (IBFAN, 2012).

Despite Indonesia's strict policy that carries a steep penalty of a year in prison or $100 million rupiah (about US $7,400) for not breastfeeding (Williams, 2013), the 2012 Indonesian Demographic Health Survey revealed that only 42% of babies received breastmilk exclusively, and 88.5% received some breastmilk for the first six months (FAO, 2017; Shetty, 2014). To account for the lack of EBF in the face of this law, experts acknowledge poor implementation of the law, with no national system for monitoring and enforcement (Walters et al., 2016). Indonesia's central government has long been involved in promoting breastfeeding, albeit in a seemingly symbolic capacity, but has yet to empower women to overcome barriers to breastfeeding.

Barriers to Breastfeeding

Women in Indonesia identify many reasons for not exclusively breastfeeding: low milk production, problems with baby's suckle, inverted nipples, influence from husband or friends, motivation to be seen as "modern," going back to work, illness, and convenience of formula (Ahluwalia et al., 2005; Suharyono, & Matulessy, 1997, p. 341; Nuzrina et al., 2016). Rural women tend to breastfeed longer than women in urban

areas, and women in Jakarta were found to breastfeed for the least amount of time (Suharyono & Matulessy, 1997). The steady uptick in bottle and formula-feeding among urban women has been argued to be associated with lack of knowledge, but the regional comparison also highlights the breastfeeding challenges facing, and resources afforded to, women in more affluent and professional, urban communities that may affect decisions about infant feeding.

Comparatively, the Indonesian government has been more progressive than many high-income countries including the US in its support for families' need to maintain income during maternity leave (National Conference of State Legislatures, 2014), but much is left to be done to implement policies that effectively promote breastfeeding. Concerning workplace barriers, Indonesian policy mandates 13 weeks of paid maternity leave to be provided by employers. However, women must begin to take leave 1.5 months prior to their due date, which leaves only 1.5 months of postpartum paid leave (Walters et al., 2016). This means that women who carry their baby past their due date are expected to breastfeed for more than two-thirds of the mandated 6-month period while they are working. Once she is back to work, National Labour Law 13 of 2003 mandates a woman's right to breastfeed during work hours, but there are gaps in policies regulating and implementing the logistics of managing breastfeeding while at work (Spagnoletti et al., 2017). In their examination of workplace-based determinants of breastfeeding, Basrowi et al. (2015) found that only 20% of women had access to a dedicated lactation facility at their workplace. Februhartanty et al. (2012) found that out of 168 Indonesian working mothers with infants less than 6 months old, only eight were practicing EBF at the time of their research. Another study in Yogyakarta found that only 22.2% of working mothers were exclusively breastfeeding (Ratnasari et al., 2017). In addition to various logistical barriers to breastfeeding, deeply ingrained culturally bound beliefs play a powerful role in women's decisions about breastfeeding.

Cultural Implications on Breastfeeding

Relatively few studies examine the motherhood experiences of women in non-Western cultures (Afiyanti & Solberg, 2015). Thus, questions remain about how culture influences decision-making about infant feeding. More specifically, we know very little about Indonesian women's decisions and behaviors regarding breastfeeding (Afiyanti, & Juliastuti, 2012). This is especially concerning given the abysmal malnutrition rates in Indonesia that could be alleviated with improved breastfeeding practices (FAO, 2017).

During the past several decades, Indonesia has been experiencing rapid changes economically and socially, yet many people maintain traditional values and practices, especially concerning motherhood (Afiyanti & Solberg, 2015). Beliefs about motherhood transcend ethnic diversity in Indonesia, and the primary roles of women are seen as mother and caregiver, which are highly valued (Afiyanti & Solberg, 2015). In a phenomenological study exploring the social construction of what it means to be a mother, one Indonesian woman spoke of the importance of breastfeeding as the "duty" of the mother (Afiyanti & Solberg, 2015, p. 494). Afiyanti and Solberg noted that the idea of a good mother in Indonesia went far beyond how a woman interacted with her baby, and found that mothers were expected to prioritize their babies' and families' needs over their own. Despite low EBF rates, exclusive breastfeeding was found to be one of the behaviors that were believed to make the best mothers and healthiest children, which encouraged some women in West Jakarta to continue breastfeeding (Nuzrina et al., 2016). Furthermore, that same group of women agreed that breastfeeding was a basic instinct that mothers should have, and that breast milk should be the first food for a newborn baby (Nuzrina et al., 2016). Contrary to these widespread pro-breastfeeding beliefs, this proposal highlights several contradictions found in the literature examining barriers and facilitators of breastfeeding, emphasizing inconsistencies between beliefs and behavior. It may be safe to assert that breastfeeding is universally believed around

the world to be the healthiest choice for infant feeding as well as “what good mothers do” (Knaak, 2009, p. 350; Mozingo et al., 2000), yet nearly every public health agency worldwide continues work to increase breastfeeding rates.

Religion also plays an important role in how parents perceive breastfeeding. Indonesia – home to 260 million people who speak more than 700 languages across at least 16 ethnic groups – is the largest and most populous Muslim (87.2%) nation in Southeast Asia (Central Intelligence Agency [CIA], 2017; Thompson, 2017). Muslims have a strong breastfeeding value that reflects the Quran’s recommendation to breastfeed children until 2 years of age (Bayyenat et al., 2014; Shaikh & Ahmed, 2006). To date, I have found no published analysis of breastfeeding based on religion in Indonesia, but since more than 80% of the country is Muslim, it is reasonable to suggest that suboptimal EBF rates are represented among Muslims as well as within other religions. Islam places equal responsibility on both parents for the success of breastfeeding (Shaikh & Ahmed, 2006). Husbands have been shown to help mothers continue to breastfeed when they hold supportive attitudes about breastfeeding, anticipate their wives’ needs, provide encouragement, share in the experience, and defend their wives against criticism for breastfeeding (Tohotoa et al., 2009).

Swanson and Power (2005) demonstrated that women’s decisions to breastfeed were largely influenced by cultural norms and practices that were seen as socially acceptable, and the nuance of variations of beliefs across a country may produce an elusive set of rules. Contradictory to the popular pro-breastfeeding beliefs associated with motherhood among Indonesian women previously cited, Afiyanti and Juliastuti (2012) warned of social stigma around breastfeeding in Indonesian communities where family members hold different “views, beliefs and values about feeding methods” (p. 490). It is common for new mothers to have many visitors in Indonesia, which opens the opportunity for negative reactions (e.g., comments that a mother is not producing

enough breastmilk, a baby is too small) and advice from friends and family (e.g., formula should be used to supplement or replace the breastmilk) that are contradictory to EBF practices (Nuzrina et al., 2016).

Nuzrina et al.'s (2016) analysis revealed another contradiction when they reported that several women in Indonesia claimed to stop breastfeeding after the first day postpartum because of "common beliefs, social pressures, and lack of support" (p. S48). One common belief undermining breastfeeding efforts is that large babies with weight in the higher percentiles are healthy, which may affect a mother's decision to continue breastfeeding exclusively or to begin supplementing with formula (Nuzrina et al., 2016). Smaller babies are believed to be less healthy, and are more likely to be offered honey or bananas to help them gain extra weight. In Yogyakarta, breastfeeding is undermined by common practices such as giving a baby sugar water or tajin (water from boiled rice), and discarding the most nutrient and antibody-rich form of human milk, colostrum, because the yellow, thick, sticky substance is misconceived to be "stale" (Ratnasari et al., 2017, p. S33).

A key precipitating factor in women's decisions to wean their babies and supplement their breastmilk is the belief that they cannot produce enough milk, which is consistent with a myriad of previous studies (Ahluwalia et al., 2005; Afiyanti & Juliastuti, 2012; Nuzrina et al., 2016). This uncertainty about milk production inherent to the breastfeeding process may perpetuate unfavorable outcomes and perceptions, thus influencing decisions regarding cessation and duration of EBF. Such misconceptions about milk production have been linked to a lack of knowledge about breastfeeding (Paramashanti et al., 2016), and reflect strongly held beliefs across generations in Indonesia. In contrast, some breastfeeding mothers in Indonesia report feeling happy as a result of producing large amounts of milk, which has been credited as the source of the additional confidence needed to decide to continue breastfeeding exclusively (Nuzrina et

al., 2016). The contradictions in the aforementioned findings about cultural trends in Indonesia as well as predictors of breastfeeding behavior highlight a central aspect of the rationale for this study that explores dimensions of communication from a holistic perspective as it relates to decision-making about behaviors.

These contradictions often manifest as generational differences, and are often pervasive enough to override authoritative medical advice in some cases. Grandmothers have been reported to give infants solid food, supporting the belief that certain foods provide health benefits that breastmilk cannot provide, despite medical advice stating that solid foods before six months of age is associated with more infections and obesity among other negative outcomes (Nuzrina et al., 2016). Even more surprisingly, infants who fall ill are often supplemented with formula because of a prevalent misconception that a mother's milk may have caused the illness (Paramashanti et al., 2016). Very few viral infections (e.g., HIV) can be transmitted from a breastfeeding mother to an infant, leading to advising a mother not to breastfeed. In fact, a mother's continued breastfeeding through most illnesses provides the infant with the necessary antibodies to fight off infections (Lawrence, 1997).

The cultural beliefs and practices noted in this section demonstrate wide variations within Indonesian culture. However, it is important for health care practitioners to recognize the cohesive power beliefs may have on individuals as members of a group. A recent breastfeeding promotion intervention was implemented with guidance from Muslim scholars, village leaders, and midwives to ensure that deeply ingrained paternalistic and high power-distance norms and practices in families and society were not violated (Susiloretni et al., 2013). The intervention targeted non-working mothers who lived with their husbands and grandmothers in an agricultural area of Central Java Province and was implemented at the district, organizational, village, family, and individual levels (Susiloretni et al., 2013). Susiloretni et al. found that while EBF duration

was almost 18 weeks longer among mothers in the intervention group, the highest rate of EBF cessation occurred within the first week after birth despite the intervention. They concluded that, “behavior change is best when it changes the norm of the community” (Susiloretni et al., 2013, p. e53) and found that women in the intervention were 10 times more likely to practice EBF at 6 months postpartum compared to the control group. This relatively successful community-based ecological approach to EBF promotion attempted to change behavior through a spiritual and religious perspective, but the high rate of cessation within the first week of life demonstrates the enduring nature of culturally bound beliefs and other barriers such as returning to full-time employment at a workplace that is not conducive to pumping. This research recognizes the imperative to continue work in this vain to continue promoting EBF by identifying the unofficial rules for living and transforming them to support healthy behaviors.

In contrast to Western models (i.e., WHO’s model) for breastfeeding behavior change that predict diffusion in a top-down manner from the better-educated people to poor urban people, trends in Indonesia have revealed the opposite direction of influence (Joeseof et al., 1989). In fact, a declining tendency to breastfeed among women in urban areas of Indonesia has been acknowledged since the mid-1970s (Sastromidjojo, 1979). While WHO’s model was validated by trends observed in the United States and Brazil, less educated women led the breastfeeding revival in the early 1980s in Indonesia and Malaysia, where Eastern cultural and religious values tend to be similar (Joesoef et al., 1989). This finding suggests that breastfeeding promotion will not be successful with universal intervention approaches. Alongside cultural and religious values, knowledge about the benefits of breastfeeding and how to overcome problems that can arise during breastfeeding has consistently been found to be an important determinant in a woman’s decisions about feeding her infant.

Determinants of Breastfeeding

A mother's decision to breastfeed exclusively is multi-faceted, and various predictors have been associated with breastfeeding (Roberts et al., 2013). To date, the majority of global breastfeeding research examines predictors and barriers of initiation and duration of EBF grounded in the tenets of the Theory of Planned Behavior, which asserts that beliefs about a behavior influence intentions about the behavior, which, in turn, predict actual behavior (Bai et al., 2011; Behera & Kumar, 2015; Duckett et al., 1998; Fam, 2012; Khoury et al., 2005; Kronborg &Væth, 2004; Meedya et al., 2010; Swanson & Power, 2005; Swanson et al., 2017; Tengku et al., 2016; Wambach, 1997). In their study of predictors of EBF, Behera and Kumar explain that the key factor of the Theory of Planned Behavior, behavioral intention, is determined by attitudes toward the behavior, subjective norms, and perceived control to enact a behavior. Despite its popularity, the Theory of Planned Behavior has faced its share of criticism based on contradictory findings demonstrating its limited ability to explain behavior beyond a rational decision (Sniehotta et al., 2014).

Findings from this objectivist theoretical standpoint are fraught with contradictions. For example, Ahluwalia et al. (2005) examined predictors of breastfeeding using cross-sectional secondary data from the Pregnancy Risk Assessment and Monitoring System in the US, and concluded that prenatal intention to breastfeed is a significant predictor of initiation and continuation of breastfeeding. Yet, 12 years prior to those findings, Wambach (1997) found that intent accounted for only 4% of variance in duration in a study of breastfeeding intention and outcomes among 135 women in the US. Further illustrating the limited predictive validity of the Theory of Planned Behavior, McEachan et al. (2011) conducted a meta-analysis in which they found that intention and perceived behavioral control only accounted for 19.3% variance in outcome behaviors.

Beyond mixed empirical support for the theory, research from a sociopsychological perspective assumes an objective authority on understanding a phenomenon – a lived experience – and oversimplifies its complexities, and overlooks individuality. Epistemologically, an examination of breastfeeding in terms of predicting behavior – such as research testing tenets of the Theory of Planned Behavior – minimizes potential for understanding the constitutive nature of communication and its effects on an individual's decision-making in this context. In response, this research sought a more idiosyncratic understanding of women's breastfeeding experiences and decisions, which complements the existing research and contributes a more nuanced framework for practitioners to promote breastfeeding. I explored socially constructed meanings related to motherhood and infant feeding decisions and experiences that arise through communication, which are overlooked by theories within the predictive paradigm. Additionally, this research is consistent with the Food and Agriculture Organization of the United Nations (2017) recommendation for further research on the role of perceptions and decision-making processes as they relate to nutrition, including exploring how to enhance individuals' aspirations and perceptions about nutrition. The following section reviews literature and summarizes various findings on communication concepts that have been considered in recent breastfeeding research.

Chapter Two: Literature Review

The Role of Communication in EBF

The role of communication is often overlooked in breastfeeding research. The majority of research in the communication discipline has examined breastfeeding through rhetorical analyses (Beach, 2017; Boon & Pentney, 2015; Morrissey & Kimball, 2017; Rose, 2012) or content analysis of media representations or online comments (Foss, 2013; Gearhart & Dinkel, 2016; Gray, 2013; Norwood & Turner, 2013). Other studies have focused on improving messaging for more effective breastfeeding promotion (Dougherty et al., 2018; Koerber, 2006; Kraft et al., 2014; Mackert et al., 2016; Martinez-Brockman et al., 2018; McKeever & McKeever, 2017). One analysis qualitatively explored the persuasive appeal of environmentally friendly messages that emphasized the absence of packaging and unnatural additives in breastmilk to promote breastfeeding for a longer duration (Hamilton, 2015). While message development is important, a complete understanding of how best to promote breastfeeding requires attention to the role of individuals' experiences and culturally bound beliefs in decision-making. Cripe's (2017) study reflects this goal by analyzing interviews with 23 mothers to identify barriers to working while breastfeeding. Cripe only briefly discussed the role social support plays in decision-making about breastfeeding, which failed to acknowledge the central role communication plays in one's experiences and decisions about breastfeeding. Koerber et al. (2012) more effectively highlighted the role of communication in their study about how women coped with breastfeeding failure through a qualitative analysis of focus group transcripts. The current research attended to individual experiences and beliefs using a sociocultural, constructionist approach, and contributes to the scant naturalistic inquiry of communication about breastfeeding in the communication discipline (e.g., Striley & Field-Springer, 2014).

Communication is a key means of increasing knowledge. Communication is also an integral component of the top three modifiable factors most strongly associated with prolonged breastfeeding: intention, self-efficacy, and social support (Meedya et al., 2010). Meedya et al. gave a nod to the significance of communication with their meta-analysis findings that indicate women's partners and their broad social networks play a role in increasing women's intentions to breastfeed, but a firm evidence base is still lacking (see also McIntosh, 1985). The purpose of this study was to explore the role that communication plays in decision-making about breastfeeding among mothers in Indonesia.

Recent studies have noted the crucial role knowledge about breastfeeding plays in the exclusive practice (Februhartanty et al., 2012; Paramashanti et al., 2016). Compared to other countries in southeast Asia such as Malaysia and Taiwan, prevalence of EBF in Indonesia is low, which has been argued to be associated with lack of knowledge because many women believe they are breastfeeding exclusively when they are not (Basrowi et al., 2015). Working mothers in Jakarta reported providing EBF to their infants for six months, but when asked if they offered anything other than breastmilk to their babies before six months of age, it was found that only 32% of those women actually were exclusively breastfeeding (Basrowi et al., 2015). Nuzrina et al. (2016) also found that none of the 14 women in West Jakarta who participated in their longitudinal study on breastfeeding decision-making understood the term "exclusive breastfeeding" or how or why infants should be provided EBF. Maternal knowledge about breastfeeding has been found to be the only promoting determinant of EBF among women in Indonesia (Basrowi et al., 2015; Nuzrina et al., 2016; Susiloretni et al., 2015), and this research explored how maternal knowledge is cultivated.

Health care workers are a primary source of information about breastfeeding for mothers, but most lack the training and education needed to provide helpful and

consistent support to women (IBFAN, 2012; Shetty, 2014). While training for formal health workers is regulated, village health centers in Indonesia known as Posyandus, and community-based health workers are not covered by legal breastfeeding regulations (Shetty, 2014). This lack of oversight leaves room for inconsistent information on breastfeeding and counterproductive support. According to the 2012 Indonesia Demographic and Health Survey, 36% of births between 2007 and 2012 occurred at home, but 83% of all births were assisted by a "skilled provider" (p. 121), which includes doctor, obstetrician, nurse, and midwife. Even though a majority of births from 2007 to 2012 (63%) occurred in a public or private sector facility with trained health care workers (Statistics Indonesia, 2013), a mother's need for consistent support does not stop in the hospital. It is imperative that accurate and consistent information is available to mothers throughout their EBF relationship with their infant, yet Indonesia has no official program for counseling and follow-up to make breastfeeding implementation feasible (IBFAN, 2015). Of all births in Indonesia from 2007 to 2012, 17% were assisted by a traditional birth attendant, relative, friend, someone else, or no one, all of which fall outside the jurisdiction for formal breastfeeding regulations (Statistics Indonesia, 2013). Notably, Indonesia ranked next-to-last among 51 countries for information, education, and communication strategies for improving breastfeeding rates and practices (IBFAN, 2012).

Despite the emphasis placed on knowledge, knowledge alone does not facilitate breastfeeding. In fact, Chatman et al. (2004) found in Jamaica that knowledge did not predict a woman's success with EBF; instead, the infant's father's role as primary income earner was a strong predictor. It would be an oversimplification to conclude that knowledge directly affects behavior, and the current research explored the not-yet-well-understood relationship between knowledge, experience, and social context surrounding breastfeeding decisions. Although the role of information is widely recognized as an

important determinant of breastfeeding, two studies (Hoddinott & Pill, 1999; McIntosh, 1985) call into question traditional conceptions of its role. McIntosh (1985) interviewed 60 first-time mothers on six occasions from the third trimester of their pregnancies to nine months postpartum to explore attitudes about breastfeeding practices. Hoddinott and Pill (1999) explored how first-time mothers decided whether to breastfeed by conducting interviews with 21 first-time mothers between early pregnancy and 10 weeks postpartum, and two focus groups with five individuals in each who were considered important sources of support by the mothers. Findings from both Hoddinott and Pill's and McIntosh's work emphasize the effectiveness of knowledge gained through one's social network compared to knowledge shared from other, more formal sources. Hoddinott and Pill's analysis distinguished between embodied knowledge (gained through experience and observation) and cognitive knowledge (gained through reading and listening), which reinforces McIntosh's conclusion about the importance of the personal and social context within which breastfeeding takes place where women may observe others breastfeeding and discuss personal experiences. McIntosh found that advice from individuals in a woman's social network is more influential for decisions to breastfeed than information about breastfeeding shared by health care workers.

In addition, other factors like previous experience may even further reduce the direct influence of knowledge on behavior. For example, research profiling eight Indonesian women found that, despite adequate knowledge about breastfeeding, a first-time (primiparous) mother was less likely to practice EBF compared to her multiparous counterparts (Februhartanty et al., 2012). Furthermore, Kronborg and Væth (2004) found no association between knowledge and EBF duration among multiparous mothers, but instead concluded that self-efficacy had a significant relationship with intention to breastfeed for a longer period. These conclusions suggest that previous experience, as an indicator of embodied knowledge and source of self-efficacy, plays a more influential

role in a woman's intent and decisions about EBF than cognitive knowledge (see also Lok et al., 2017). Hoddinott and Pill (1999) argued that the effects of embodied and cognitive knowledge will vary among individuals for myriad reasons, but women who have family and friends who previously breastfed are more likely to choose to breastfeed. Given a mother's reliance on experienced mentoring through her social network, one might conclude that peer support is important, yet community-based peer counseling is currently not common in Indonesia (Nuzrina et al., 2016).

Social Support

For the past three decades, social support has received quite a bit of attention in the health contexts because of its role in buffering stress and promoting mental health, as well as increasing adherence to treatments (Cohen & Syme, 1985; Revenson et al., 1991; Wallston et al., 1983). It is widely accepted that social support has the potential to prevent or moderate negative effects of stress on one's health, but scholars have only recently begun to recognize the complexity in interpersonal relationships that extends far beyond what was originally hypothesized about the positive aspects of social support (Barroso, 1997). Recent literature recognizes the potential for negative effects of support persons in a mother's life. Insightfully, instead of calling these individuals support persons, one qualitative study looking at African American and Latino adolescent mothers' breastfeeding decisions identified them as "influential people" – primary sources of information, encouragement, and discouragement (Hannon et al., 2000). Hannon et al. found that influential people often shared their own negative experiences with breastfeeding, which was noted as discouraging to the adolescent mothers. However, Hannon et al. found that influential people were likely to positively influence breastfeeding decisions if they were able to provide realistic and concrete suggestions for dealing with problems. In the present work, I used the popular "social support"

nomenclature grounded in the communication discipline to emphasize a shift from the traditional conceptualization that is limited on its positive elements and effects.

What constitutes effective social support can be understood from two perspectives: 1) the recipient's interpretation of the supportive messages and behaviors and evaluation of their outcomes, and 2) the shared cultural knowledge on appropriateness of social support (Goldsmith, 1994). Furthermore, previous research suggests that different kinds of stresses may warrant different kinds of support behaviors (Cutrona & Suhr, 1992; Goldsmith, 1994). UNICEF recognized the power of social networks when they declared, "no mother should breastfeed alone" (2017, para. 4). Family members play an important role in the health behaviors of women in Indonesia (Afiyanti & Juliastuti, 2012). Women in Indonesia reported relying on the advice and support from family, particularly their husbands (Nuzrina et al., 2016). Women have expressed a need for validation of their competence and confirmation that their experiences breastfeeding are normal (Bäckstrom et al., 2010). A breastfeeding mother's parents tend to also be valuable supporters, because mothers learn from their parents' experiences (Nuzrina et al., 2016).

Conversely, lack of support from a woman's mother is one among other factors found to shorten EBF duration in Indonesia (Basrowi et al., 2015). In a study of 158 working women from nine companies in Yogyakarta, the EBF rate was almost three times higher among women with good emotional, informational, instrumental and appraisal support from their husbands and grandmothers than among those with poor family support (Ratnasari et al., 2017). When a woman is told by her mother or sister-in-law that she is not producing enough milk, she may begin to believe it, thus inducing stress resulting in even less milk production, which could lead her to stop breastfeeding exclusively or altogether. In a systematic review of literature summarizing predictors of breastfeeding, Meedya et al. (2010) reported that the perception of insufficient milk

supply – one of the most common reasons why women stop EBF – is a biological factor with a “strong psychological component” (p. 137). This suggests that communication about EBF within her social network may play a critical role in shaping a woman’s views about EBF and her milk supply. Rather than a basic instinct as previously noted in the explanation of Cultural Implications for the Breastfeeding Problem in Indonesia, breastfeeding is a multidimensional health behavior shaped by a complex interplay of biological, psychological and social factors (Afiyanti & Juliastuti, 2012; Semenic et al., 2008). The following section explains a theoretical approach to understanding these psychological and social factors.

Theoretical Framework: Problematic Integration Theory

Problematic Integration (PI) theory is a general theory of communication that describes the “dynamic relationship between communication and tensions among expectations and desires” (Babrow, 2001, p. 553). At its foundation, the theory proposes as its most basic claim that humans construct and reconstruct meanings of their experiences (Babrow & Matthias, 2009). In the absence of predictions and prescriptions, PI theory suggests a range of possibilities to describe the communicative process in any context, and it provides a powerful lens to shed light on the lived experiences of women making decisions about EBF (Babrow, 2001).

The first proposition of PI theory posits that humans have probabilistic orientations to their experiences that represent beliefs or expectations about an event or an object. PI theory’s second proposition posits that we hold evaluative orientations, which are positive or negative appraisals of the event or object (Babrow, 2001). Evaluative and probabilistic orientations serve equally as bedrocks to how we make sense of our experiences, and bring to light whether we find those experiences desirable (Babrow & Matthias, 2009). The beliefs or assumptions comprising probabilistic orientations often evolve out of perceived similarities between objects or events. These

meanings answer questions like, “What does it mean to be a good mother?” “When did my health start to decline?” “Am I breastfeeding successfully?” We tend to answer these questions in evaluative terms as well, and answer questions such as, “Am I a good mother?” “Am I in good health?” “Is my child receiving the best nutrition available?” Both probabilistic orientations and evaluative meanings can be automatic, stable, simple, and routine, or they may evolve with conscious effort (Babrow et al., 2000). These probabilistic and evaluative orientations, reflecting our worldview, are embedded in, intertwined with, and influenced by our experiences as well as communication (Babrow, 2001; Babrow, 2007; Babrow & Matthias, 2009).

The third proposition of PI theory indicates that probabilistic and evaluative orientations must integrate (i.e., coexist), and they typically do so with little effort or attention (Babrow, 2007). When our assumptions go unchallenged and our values are upheld, we spend little time or consideration sorting through the meanings of our experiences. Althought the integration of probabilistic and evaluative orientations is usually automatic, sometimes such integration is problematic, which is the fourth tenet of PI theory. These dilemmas occur when probabilistic and evaluative orientations are incompatible. PI theory asserts that problematic integrations (PI) can take the following forms: 1) divergence (e.g., incompatible expectations and desires), 2) uncertainty (e.g., ambiguity of some desire or concern), 3) ambivalence (e.g., mutually exclusive alternatives with either equal appeal or opposite evaluations), and 4) impossibility (e.g., certainty of something undesirable, or certainty of not having a desired outcome) (Babrow & Matthias, 2009).

The fifth and final proposition of PI theory states that one form of PI can evolve into another, and PI can “chain” from one topic of concern to another (Matthias & Babrow, 2007, p. 788). For example, a mother’s experience with her first baby not latching correctly despite her desire to breastfeed (divergence) could lead to fear about

whether the second baby will latch (uncertainty), which might lead to stress concerning an unsatisfying breastfeeding relationship with her child or that bottle-feeding may decrease bonding opportunities (ambivalence). In addition to chaining, the focus of the PI could also change. For example, concerns about whether a baby is receiving enough breastmilk might transform into worries about being a good parent or worries about having a healthy child.

The Role of Communication

PI theory posits that integrations – problematic or not – are created, sustained, and transformed by communication, both spontaneous and strategic (Babrow & Kline, 2000). Communication is inherent in PI as it involves processes occurring intrapersonally, interpersonally, and societally, to create, shape, clarify, obscure, challenge, and transform probabilistic and evaluative orientations (Babrow, 1992, 2007). For instance, a mother's psychological state in the immediate postpartum phase, intentions for EBF, and self-efficacy can influence how she frames her communication about breastfeeding as well as how she interprets what others say to her. Her emotional reaction to any PI she is experiencing will influence her responses to any such communication. These interactions may lead to new PI as information or support is offered. On a larger scale, ad campaigns have the capacity to frame breastfeeding concerns in ways that create or transform PI. Dilemmas are not only experienced individually or internally. PI is inherently communicative; PI is created, managed, and transformed through communication.

The constitutive nature of the relationship between communication and problematic integration enables individuals to recognize dilemmas and create PI, resolve PI, and transform their expectations and evaluations (Babrow, 2001). In short, communication "shapes and reflects" forms of PI (Babrow, 2001, p. 556). Furthermore, PI theory assumes that every single aspect of human existence – including decision-

making about EBF – is created through and affected by communication, and particularly relevant to PI is the creation of coping resources.

Decisions about breastfeeding are not simply made with discrete pieces of information. Public health initiatives and media campaigns have framed breastfeeding in such a way that makes it more than a personal decision, but rather an issue of social and moral responsibility (Knaak, 2009). Breastfeeding is often a controversial topic that quickly sorts individuals along a division based on a spectrum of attitudes toward infant feeding. It is possible that stories of other women's successful experiences with breastfeeding create PI for a new mother who may be experiencing one or more of the difficulties associated with breastfeeding. Then again, those same stories may resolve PI for a different mother experiencing the same difficulties. As a woman learns about breastfeeding, the new (often value-laden) information is likely to create new PI to work through individually as well as socially with her support network.

The Intertwined Roles of Uncertainty and Values

In the breastfeeding context, risk and uncertainty may cultivate a "culture of pressure" among parents about infant feeding (Knaak, 2009, p. 350). Knaak pointed out that the intensity with which mothers spoke about infant feeding led to the question of why breastfeeding was so important to these mothers. The enormous values surrounding raising children highlight the role of uncertainties about breastfeeding and an infant's health.

The challenge of improving breastfeeding rates is understanding the volatile and dynamic mix of interrelated expectations and desires that are likely to be different for each party involved in the decision (Hines et al., 2001). Breastfeeding is nutritionally superior to any other form of infant feeding, and it is widely encouraged by the most prominent global medical and public health organizations (AAP, 2017; CDC, 2016; FAO, 2017; UNICEF, 2017; WHO, 2017). However, the inability to measure or control milk

production magnifies the importance of uncertainties about feeding decisions that arise in a child's first two years. PI theory "offers insight into the interplay of troublesome uncertainties, profound values, and the role of communication in coping with these dilemmas" (Matthias & Babrow, 2007, p. 790).

Similar to Matthias' (2009) observation about pregnancy, decisions about breastfeeding are so value laden and connected to a mother's identity (Afiyanti & Solberg, 2015; Knaak, 2009, p. 350; Mozingo et al., 2000; Nuzrina et al., 2016), that the importance of uncertainties are magnified. Values have a profound effect on how one copes with uncertainty and manages PI (Matthias & Babrow, 2007). For example, PI caused by challenges with a child latching correctly may intensify a woman's values regarding parent-child attachment but also highlights any threat to the infant's growth rate. While some women may be able to adjust their values to cope with PI (e.g., deciding that EBF is not as important as originally believed), because values are so deeply ingrained in belief systems, other women may be incapable of compromising these values (Matthias & Babrow, 2007). For Indonesian women, it may be even more difficult to adjust the value they place on breastfeeding, because of the federal law requiring EBF for six months, adding to the complexity of dilemmas about breastfeeding.

Deciding to breastfeed before the baby is born provides some certainty in an otherwise unknown future – it provides a goal for which one can plan, and affords time to seek information. However, the decision to breastfeed is not solely reliant on a mother's prenatal intent – an infant's ability to latch, the mother's self-efficacy, the support she receives, her physical and emotional reaction to breastfeeding, and the details of the logistical demands are nearly unknowable until a mother actually begins to breastfeed. It is only in the action itself that a mother's intentions are put to the test (Bottorff, 1990). For example, there is no way of predicting when or how frequently an infant will want to

breastfeed, whether an infant is truly satisfied, or whether a mother's milk is nutritionally sufficient.

It is important to note that not all uncertainty results in PI; uncertainty related to a highly valued probabilistic orientation (i.e., baby's health) is more likely to evoke PI than uncertainty regarding a less valued orientation (i.e., baby's hair color) (Matthias, 2009). The determining factor for PI evocation in the face of uncertainty – one's values – is culturally bound and constituted through (and reflected by) communication. These values may be held individually or socially. For example, one might adjust one's evaluative orientation toward an object to reduce unpleasant feelings about the PI, reflecting the underlying assumption of the theory that "uncertainty is only problematic to the extent that we value (positively or negatively) what we are uncertain about" (Babrow, 2001, p. 563).

As Babrow and Kline (2000) have noted, research often approaches uncertainty from a typical Western perspective assuming that most people, when confronted with uncertainty, will seek more information to reduce uncertainty, but this is not always true. In fact, it is often true that uncertainties cannot be resolved by more information (Babrow, 2001). Additional information may introduce contradicting evidence or contribute to an overwhelmed feeling from having too much information, which may lead to more uncertainty. With the ubiquity of expert and personal information online (and no guarantee of accuracy), it is easier than ever to learn of the harms we could pose to our children, which may amplify one's problematic integrations during decision-making about infant feeding. Also, questions about the credibility of the sources of information may contribute to uncertainty. Even if the information is credible, consistent, accurate, and readily available, information alone may not be enough to reduce uncertainty or promote breastfeeding behavior as noted in the previous section. Not only can more information lead to greater uncertainty, but reducing uncertainty may not be the most appropriate

response. Means by which to reduce uncertainty may be more undesirable than the uncertainty itself. Gathering more information may raise more questions than answers and cause more dilemmas than it may resolve. Information-seeking may lead to unenjoyable conversations, uncomfortable interactions, and may negatively affect relationships one may rely on for support.

Uncertainty, along with the need for social support, has been found to be a pervasive challenge for breastfeeding mothers (Bottorff, 1990). Much like illness, breastfeeding is “permeated with uncertainty” (Babrow et al., 2000, p. 63), yet very little is known about how women in Indonesia cope with uncertainty. When it comes to uncertainty related to breastfeeding among Indonesian mothers, the most prevalent discussion surrounds milk production, which has been cited as a prominent reason for ending EBF (Afiyanti & Juliastuti, 2012; Ahluwalia et al., 2005; Nuzrina et al., 2016). In one study, an Indonesian woman discussed her reason for not exclusively breastfeeding, and was quoted as experiencing uncertainty about the amount and quality of her breastmilk compared to the formula her baby was fed during a three-day separation in the hospital immediately after birth (Afiyanti & Juliastuti, 2012). Even though more information is not always the best solution for coping with uncertainty, a (near) complete lack of knowledge about breastfeeding management could lead to early weaning. Another study highlighted the negative toll a lack of knowledge plays on breastfeeding rates in Indonesia, which could represent another source of uncertainty about breastfeeding (Basrowi et al., 2015). The uncertainty that Indonesian women experience toward breastfeeding takes on an additional layer of complexity compared to uncertainty experienced by mothers living elsewhere, since the Indonesian law mandating EBF for the first 6 months places additional value on EBF. In Indonesia, women may want to breastfeed, but they also face the risk of legal penalties if they choose to supplement or exclusively formula feed.

The social nature of decision-making and coping with uncertainty in the breastfeeding context emphasizes the role of communication that scholars have only begun to explore. PI theory acknowledges the complexities of communication and asserts several ways of coping with uncertainty that extend beyond the reduction-focused ideology of earlier theories pertaining to uncertainty (Babrow, 2001). Traditionally, uncertainty was narrowly understood to bring about negative stress, but Babrow et al. (2000) presented several cases using PI theory that illustrate the positive outcomes of uncertainty, such as sustaining hope for a future cure when coping with an illness. Instead of seeking more information, a mother may recalibrate her value system to alter her evaluative orientations (i.e., decreasing the value she places on the desired outcome). Alternatively, one may cope with uncertainty by adjusting one's probabilistic orientation. For example, when a woman is unwilling or unable to compromise the value she attaches to EBF, she may instead adjust her probabilistic orientation by resolving to just knowing that her breastmilk will be enough for her baby's nutrition. Circumstances may warrant that uncertainty be reduced, maintained, or even increased as the best way to cope. However, in many cases, "no means of managing uncertainty will be fully satisfying" (Babrow et al., 2000, p. 44).

These approaches for coping with uncertainty are taken individually or through communicating with others, either consciously or unconsciously. When experiencing uncertainty about breastfeeding, information-seeking cannot guarantee a successful breastfeeding relationship. Certain questions about breastfeeding may be left unanswered – perhaps they are fundamentally unanswerable – because a mother's milk is not tested for nutrients or monitored for adequate production, which leaves the uncertainty unresolved, thus warranting the need for coping with the uncertainty that may have led to PI. The coping framework of PI theory acknowledges that there is no

single best way to respond to uncertainty since it can take on myriad forms (Babrow & Kline, 2000).

While PI theory has been applied to various value-laden health-related contexts largely related to illness, this research highlights that women can still wrestle with PI during healthy natural processes such as breastfeeding and might rely heavily on her partner (Februhartanty et al., 2012), mother, or others in her support network, just as has been shown for pregnant women and their health care providers during prenatal visits (Matthias & Babrow, 2007). To date, Koerber et al. (2012) have published the only study exploring mothers' breastfeeding decision-making processes using a communication-based theory, and they argue that understanding individuals' problematic integrations is useful for improving ways breastfeeding information is communicated to mothers.

Research Aims

Mothers face an array of complex decisions when engaging in breastfeeding, which can be complicated by probabilities, values, and uncertainties. In this research I sought to understand the decision-making processes of Indonesian women as they contemplate the best and most appropriate way to feed their infants, with a focus on the integrative dilemmas that these women face and the role that communication plays in creating, maintaining, decreasing, or resolving these dilemmas. Previous research demonstrates that breastfeeding is highly valued among women in Indonesia, yet efforts to explain the relatively low rate of EBF are over-simplified to address one (or a few) aspect(s) of the complex issue. Hence, we are still left without much insight on the individualized and culturally bound dilemmas that women in Indonesia face when making decisions about breastfeeding, and the communication they engage in as a response to these dilemmas.

Chapter Three: Methods

Breastfeeding decisions are cultivated through interpersonal, sociocultural, and economic conditions, rather than individual acts (Schmied & Lupton, 2001). Decisions about breastfeeding are complex and interwoven with a woman's physical and mental health, and her baby's health. The structure and needs of her family and her living conditions, as well as societal, economic, and political influences, also play important roles in decisions about EBF (Schmied & Lupton, 2001). Inquiry of complex linkages among health determinants in vulnerable populations demands transformative and flexible methodological approaches (Stewart et al. 2008). Scholars are calling for a close examination of health communication aspects of breastfeeding (Koerber et al., 2012) and culturally bound beliefs and attitudes surrounding breastfeeding (Semenic et al., 2008) to enrich previous research conducted in public health, nursing, and other health care fields. Accordingly, this research engaged narrative inquiry from a social constructionist perspective that leveraged the lived experiences of women feeding their infants to understand how meaning is constructed, utilized, and managed through decision-making processes. Narratives function to "reflect and create cultural values" (Gergen, 2005, p. 107), and exploring women's stories provides insight into the nuances of infant feeding decisions that have historically been resistant to breastfeeding promotion interventions.

These narratives link personal rationale for infant feeding decisions with relational contexts, and structural and sociocultural factors such as socioeconomic constraints and workplace demands, and highlight the communication surrounding these decisions. These stories also reflect concepts of PI theory such as the dilemmas women face and values held when making decisions about breastfeeding, thus revealing cultural implications related to such decisions. Until Koerber et al.(2012) study, scholars

overlooked the complexities of language women used to describe their own experiences with breastfeeding.

The methodology extended beyond the knowledge-intention-behavior paradigm of traditional health promotion models such as the Health Belief Model (e.g., Skinner et al., 2015) and Theory of Reasoned Action (e.g., DiClemente, 2007; Hardeman et al., 2010; Montaño & Kasprzyk, 2015), and utilized the lens provided by PI theory that conceives individuals as active participants in the creation, interpretation, and management of meaning of their experiences, and embraces a sociocultural approach wherein infant feeding decisions are seen as much more than a rational pro-con analysis (Hoddinott & Pill, 1999). Three assumptions underscored the research methods: (a) individuals' experiences are the cornerstone to understanding health communication, (b) identity is a central issue in mothers' decisions about feeding their infants, and (c) individuals' experiences must be understood in context (Vanderford et al., 1997). Communication plays a central, constitutive role in the way we understand our experiences and ourselves. Our identity, experiences, and communication maintain a reflexive relationship, one in which its elements are inseparable and enmeshed.

To explore the role of communication in Indonesian women's decision-making about breastfeeding, I conducted semi-structured qualitative interviews with mothers and their support persons, including women's spouses, mothers, mothers-in-law, and friends, as well as health care providers and community health workers. By gathering women's and support persons' stories, these interviews explored how and why decisions regarding breastfeeding were made. This research highlights women's experiences in an effort to improve breastfeeding promotion efforts by providing nuance to approaches that consider communication and culturally bound beliefs to be the cornerstone of decision-making about breastfeeding.

Study Overview

Over the course of two trips to Indonesia in 2018, I conducted interviews (individual, and joint simultaneous with mothers and husbands or grandmothers) and focus groups with Indonesian mothers and their support persons (i.e., fathers, grandmothers, lactation consultants, and midwives). I partnered with two organizations to gain access to communities, recruit participants, provide translation during interviews, and provide culturally appropriate guidance during data analysis (see Appendices G and

Figure 1

Map of Indonesia (United Nations, 2004)

Note. Locations of data collection (Java, Bali, and Flores Islands) are circled.

H for memos requesting their support). In an effort to represent as much diversity as possible, data were collected on three islands: Java, Bali and Flores (see Figure 1).

These islands represent diversity in religious practices and economic influences on daily life, which invariably frame parents' decision-making. For instance, the public call to prayer – a melodic reminder from loud speakers atop mosques for Muslims to perform the ritual prayer known as Salat (BBC, 2009) – can be heard from any corner of Java Island five times each day and sets the rhythm for daily routine. It is an inescapable reminder of Muslim ideals and values for all facets of life. The absence of the call to prayer on Bali and Flores Islands is one prominent indicator of the diversity among the islands. Hindu temples sprinkle the hillsides and dot the coasts of Bali; ancient places of worship nuzzle between modern buildings hosting the bustle of international tourism and commerce. It was common to pass by a roadside gathering of people participating in one of various Hindu ceremonies marking communal support for a neighbor's or family member's personal joy or sorrow (e.g., funeral, wedding, illness, birth of a baby). On Flores, religious practices were reserved for Sunday mornings and personal evening prayers. A single Catholic church served as refuge for an entire village, and Sunday mornings were often the only time of rest from the demands of farming. While 90% of Indonesians are engaged in agriculture (Indonesian Ministry of Trade, 2017), only participants from Flores Island reported agricultural employment.

Research Preparation

This research was approved by Indiana University's Institutional Review Board (Exempt Protocol #1802311022) and Indonesia's Ministry of Research, Technology and Higher Education (Foreign Research Permit/315 Index Visa No. 355/SIP/FRP/E5/Dit.KI/X/2018). In compliance with Indonesian Regulation No. 41 of 2006 in fulfillment of requirements for the Foreign Research Permit, Sri Handayani (hereafter referred to as SH), native Indonesian and faculty member in Public Health at

Dian Nuswantoro University in Semarang, contributed as the local research counterpart (Ministry of Research, Technology, and Higher Education, 2016) as well as a translator and key informant (see Appendix A for memo of understanding).

Preparation of this project relied on guidance from 10 personal contacts who are native Indonesians fluent in English. My personal contacts identified potential partner organizations and key informants and made formal introductions. Via email and WhatsApp, a free internet-based instant messaging mobile application (Dove, 2019), two personal contacts (both of whom met eligibility criteria for this study, see below) provided written feedback on the proposed research design and data collection materials for cultural relevance. Feedback from personal contacts and key informants determined revisions to the data collection instruments and the strategy for participant recruitment.

Study Setting

Data collection took place in a number of cities and villages on three islands in Indonesia, an archipelago of more than 17,000 islands in Southeast Asia (CIA, 2017). This island nation forms the western border of the belt of earthquake epicenters and volcanoes commonly known as the Ring of Fire (Encyclopædia Britannica, 2019b). Java Island is the fourth largest island in Indonesia, yet the most populated island in the world (population 145 million), holding more than half of the nation's population (Indonesian Ministry of Trade, 2017). Geographic, climate, economic and ethnic diversity was represented across four cities on Java Island where the majority of residents practice Islam. As the political and economic leader, the coastal national capital city, Jakarta (population 10 million), is known for its overcrowding, gridlock, pollution, flooding, and earthquakes (Da Costa, 2019). Bandung, a mid-sized city on Java (population 2.6 million), is nestled on a river basin surrounded by mountains (World Atlas, 2017). Despite being home to over 50 colleges and universities, Bandung is often referred to as the "Paris of Java" for its extensive fashion retail outlets (Putri, 2017). Ciberon is a

relatively small port city rich with a mixture of Chinese, Indian, and Arab cultural influences that is marked with expansive suburban sprawl accounting for the majority of its 2.3 million residents (city center population is less than 300,000) (Wonderful Indonesia, n.d.). Cirebon is home to three royal palaces and is considered to be an ancient Islamic center of influence on Java Island. Lastly, the mid-sized coastal city, Semarang (population 1.8 million), is a major shipping port and manufacturing center for furniture and textiles (World Atlas, 2017). Known for its culinary variety, Semarang is recognized as an exemplary melting pot of Chinese, Indian, Arab, and European cultures that influence much of Java Island.

Bali Island represents a cosmopolitan blend of tourists and handicraft merchants. Stemming from Indian influence more than 2,000 years ago, the majority of residents practice Hinduism. Data were collected in Denpasar (population just under 900,000), the island capital, largest city and entry hub for vacationers who typically scatter to renowned beaches, temples, and mountain resorts that help earn the island's designation as Indonesia's top tourist destination (Encyclopædia Britannica, 2013; 2019a).

On Flores Island, residents practice a more rural, agricultural lifestyle, and the majority of residents practice Catholicism, a remnant of Portuguese influence from the 16th century (Indonesian Ministry of Trade, 2017). Interviews were conducted in Wolowea village (population 4,889) at the foothills of Mount Ebulobo in the Nagekeo Regency (Encyclopædia Britannica, 2012). The regional, ethnic, and socioeconomic diversity represented in these areas provided an opportunity to gather various perspectives on and experiences with breastfeeding.

Sampling and Recruitment

Participants were recruited using a theoretical sampling strategy. Theoretical sampling is an emergent process of conducting observations, interviewing new

participants and/or re-interviewing earlier participants, among other data collection methods, following the initial identification of key themes or ideas worth exploring further (Charmaz, 2006).

Recruitment efforts varied based on island. All but two participants were referred by staff from two organizations: a) Indonesian Breastfeeding Mothers' Association (AIMI), a non-profit nationwide grassroots breastfeeding promotion organization active in 13 of 34 provinces, referred participants on Java and Bali Islands (Spagnoletti et al., 2018), and b) Plan International, a non-profit global humanitarian organization (active in 76 countries) focused on children's rights and equality for girls, particularly early childhood development in remote areas, referred participants on Flores Island (Plan International, n.d.). About a dozen participants from Java and Bali islands were members of AIMI as lactation consultants or volunteer staff. On Flores Island, participants were either staff members of Plan International (*n* =1), a personal acquaintance of a staff member (*n* = 4), or a client of one of Plan International's many programs (*n* = 25). One participant was a personal contact who completed a pilot interview, and she referred her husband who was also pilot interviewed. As a stipulation for both organizations' support, I signed an agreement that the data collected as a result of this research will not be used for the benefit, promotion, sale or marketing of breastmilk substitutes or violate the WHO's International Code of Marketing of Breastmilk Substitutes (Appendix B).

All participants were at least 18 years of age. Interviews were conducted with individuals from the following groups, originally defined as 1) women who were born and raised in Indonesia, have given birth to and raised a child since Indonesia's breastfeeding law was enacted in 2009, and breastfed for at least one day in the infant's first six months of life; 2) fathers who have had a role in raising a child that was breastfed at least one day and born since 2009; and 3) (non-spousal) support people for

mothers of children born since 2009 (e.g., sibling, parent, lactation consultant, midwife). If a support person also fit the criteria as a mother (as many lactation consultants and midwives did), she was classified as a mother for this research, and asked to discuss her personal experiences as a mother and support person. Because theoretical sampling guided the data collection strategy, the findings from the first round of data collection informed changes and strategies for the second round of data collection.

Participants on Java and Bali Islands received cash compensation for travel and time as an incentive for participation (equivalent to no more than $7USD per person, determined by a designated member of AIMI familiar with average travel time and costs in each city). Participants on Flores Island received an infant hygiene kit as compensation in place of cash at the request of Plan International to ensure their clients did not associate any activity affiliated with Plan with financial gain.

Study Materials

Demographic and eligibility data were collected with a pen-and-paper survey before the in-person interviews. For cultural applicability, general demographic items were modeled after the Indonesia Demographic and Health Survey 2012 (Statistics Indonesia, 2013), and key informants provided feedback for revisions. SH translated from English to Indonesian, and a key informant (member of AIMI) adjusted those translations for the most contextually relevant phrasing for breastfeeding. For mothers, in addition to general demographic information, the survey (see Appendix C) also asked about their motherhood and infant feeding experiences. For example, how many children she had and when they were born, the location of her most recent birth, breastfeeding and formula experiences, details of her current residence such as who and how many people live with her and access to potable water. For support persons, the survey (see Appendix D) asked general demographic questions as well as about their role supporting a mother with her infant feeding decisions.

Interview Guides. The interview guides were initially prepared for (and pilot-tested during) individual interviews, as intended to be used. Questions on the interview guide for mothers (see Appendix E) addressed several topics related to infant feeding including: a) expectations, b) experiences (i.e., successes and challenges), b) information-seeking, c) social support, d) decision-making, and e) values related to motherhood. Interview guides for support persons (see Appendix F) included questions that covered topics such as: a) memorable conversations with mother(s), b) advice and support offered, and c) values related to motherhood.

Revisions to the interview guides were based on feedback from key informants, pilot interviewees, and initial impressions of data after data collection began. For example, after realizing (during round one of data collection) that awareness of Indonesia's federal breastfeeding law was limited to individuals who are lactation consultants, members of AIMI, or midwives, I stopped asking lay mothers about the law.

Pilot Interviews. The interview guides were pilot-tested with one Indonesian mother and her husband in individual audio-recorded phone calls using WhatsApp. The pilot interviews lasted one hour and 17 minutes, and 49 minutes, respectively. Both participants were chosen for pilot interviews because of their ability to provide meaningful feedback for revising the interview guide to be culturally appropriate. The mother attended a university in the United States, and her husband attended a university in England, which demonstrated their fluency in English and familiarity with Western cultures. Their experience as expatriates in Western countries provides a point of comparison to be able to understand the intent of questions in light of cultural differences. Their English fluency was important for the phone interview so that I was able to conduct the pilot interviews before I traveled to Indonesia to allow time for revisions based on feedback and transcript analysis.

Both participants provided feedback for rephrasing questions to be clearer in addressing Indonesian experiences. They also shared their perspectives on how they felt about answering questions on the different topics, length of the interview, and tone of follow-up questions. Their feedback and my observations of the transcripts guided initial revisions to change the wording of some questions to avoid irrelevant answers and providing examples of common answers for participants who seem unclear on how to answer. Revisions to the instruments were minor enough to include the pilot interviews in the final dataset.

Data Collection

Audio-recorded face-to-face interviews and focus groups were conducted during two trips to Indonesia in spring (Java and Bali islands) and fall (Java and Flores islands) of 2018. In an effort to ensure the voluntary nature of participation, before I began the interviews and focus groups, I briefed participants on their right to refuse to answer any question, stop the interview, and request the removal of their data at any point after the interview concluded, which was also provided in written form on the survey. I also provided an opportunity for participants to ask questions before and after their participation.

To mitigate the impact of perceived bias toward breastfeeding on the tone of my interviews, I explained my purpose as focusing on choices women make when feeding their babies. This approach enabled breastfeeding to be discussed in the wider context of family and social life according to the individual's own priorities (Hoddinott & Pill, 1999).

Awareness of one's influence on data collection also allows a researcher to alter the research process to generate data (Finlay, 2002). The most prevalent decision I made in this regard was with my wardrobe. Considering the humid tropical climate and Islamic expectations for women's modesty, I compromised between the demands of

these two realities and wore loose-fitting, breathable clothes that covered my shoulders and knees. I did not want my clothing to become a distraction. I also made several adjustments in the phrasing of interview questions based on my experiences and reflection on each preceding interview.

Several details of data collection were determined by the preferences of participants. To accommodate preferences for joint interviews, particularly with a mother and her support person, both interview guides were referenced during the same interview; however, the guides were not followed consecutively. The majority of questions during joint interviews came from the mother's interview guide, and support persons were prompted for corroboration or their divergent perspective as opportunities arose through mothers' stories.

At the end of the interview, prior to parting with participants, I identified local AIMI support services for those who were not members, were currently breastfeeding and shared they did not know where to find breastfeeding support during the interview. Interviews lasted between 30 and 90 minutes, and focus groups lasted between one and two hours.

Round 1

Twenty-two interviews and eight focus groups were conducted in a variety of public and private spaces based on availability of resources determined by staff of AIMI and Plan International, and participants' preferences. While on Java Island, interviews were conducted at a public coffee shop (owned by an AIMI volunteer and key informant) in Jakarta, a conference room at a women's health clinic in Semarang, a mall smoothie shop and hotel lobby restaurant in Cirebon, and a private conference room above a women's clothing shop in Bandung. In each of the more public spaces (e.g., coffee shop), I offered for participants to choose the location of our table to fit their preference for privacy and suggested we sit away from crowds to ensure the quality of the audio

recording. Several participants living in and around Semarang also hosted interviews in the front rooms of their homes. SH accompanied me at the one focus group and all interviews, five joint and three individual, in Semarang. On Bali, all interviews and focus groups were conducted in a private conference room at a membership-based co-working café owned by an AIMI member. In total, I conducted interviews and focus groups with 71 participants during round one of data collection. Participants' children and non-participating family members were commonly present during interviews.

Round 2

Following preliminary analysis of data collected during the first round, a theoretical sample was recruited for the second round. The theoretical sampling strategies were determined for my second two-week visit October-November 2018 as themes, contradictions, gaps and questions emerged from first-round analysis of the initial dataset (Charmaz, 2006). SH and several key informants also had considerable input, including ongoing discussions about my observations and interpretations of the data, and discussion of the emerging themes throughout the entire data collection timeframe. In all, 49 men and women participated in interviews and focus groups on Java and Flores Islands during round two of data collection, and SH accompanied all but one individual interview.

Original inclusion criteria were revised to include only women who gave birth within the past year instead of women who gave birth since 2009. This change was made because the original criterion was too broad to garner the richest, most detailed data about infant feeding experiences. Some mothers were trying to remember conversations that occurred nearly 10 years prior the interview, which led to relatively vague recollections.

Additionally, I targeted recruitment efforts toward mothers from a lower socioeconomic background to increase diversity in the sample based on both income

and education level. It has become evident that there was a potential relationship between mothers' desire to breastfeed, their education and income, and ability to seek support to overcome challenges. Data collection continued alongside iterative constant comparative thematic analysis, and concluded when saturation was achieved, when new data no longer sparked new "theoretical insights" (Charmaz, 2006, p. 113). More specifically, no new lessons arose from the data about thematic patterns related to decision-making and support relevant to infant feeding.

In Jakarta, one joint (mother and father) and 9 individual interviews were conducted in a lounge area of an urban neighborhood midwifery clinic (owned and operated by a participant of this research who is also an acquaintance of a key informant from AIMI). In Wolowea, on Flores Island, two village midwives were interviewed together at their medical clinic, and all other interviews were conducted in women's homes. At least one midwife or Plan International staff member accompanied SH and me on every interview. For the first three interviews in Wolowea, a small group of three to five Plan International staff alongside two midwives, SH and I were present for the interviews. To reduce the possibility for distractions, I asked for all individuals not directly involved in the interviews to step outside.

After realizing that mothers in Wolowea were reticent to share their opinions (many open-ended questions were met with participants' silence), I discussed possible causes with the accompanying midwives and SH. One of the reasons SH and I speculated was because I was a foreigner. Even though the midwives insisted that my presence was not the barrier and that they, themselves, have an equally difficult time getting information from women in Wolowea, I decided to explore whether my involvement in the actual interviews was inhibiting data collection. For two interviews, I stepped outside of the home (after introducing myself as a foreign researcher interested in how women feed their babies and explaining the study) and waited out of earshot

while SH conducted the interview with translation assistance from the midwives. After SH observed she was having an equally difficult time getting detail of women's opinions in my absence, I was present for the remaining interviews.

The focus group (*n* = 8) was held in a large meeting hall at the center of the village, the only indoor space we encountered in the village large enough to hold a group larger than four people. Nine women originally attended the focus group, but one woman revealed she never breastfed her baby as a result of her Hepatitis C diagnosis, so her contributions have been discarded. Table 1 summarizes the number and type of interviews that were conducted in each location.

Table 1

Frequency of Individual, Joint and Focus Group Interviews in Each City, Island from Both Rounds of Data Collection

	Java				Bali	Flores	
	Jakarta	Bandung	Cirebon	Semarang	Denpasar	Wolowea	Mbay
Ind.	10	0	2	3	1	13	3
Joint	3	7	0	5	1	3	1
Focus Group	1	2	2	1	2	1	0

Language Translation. Interviews were conducted in English or were translated to Indonesian by SH or a member of AIMI. A professional translator was hired to assist with one focus group (*n* = 9) conducted in Cirebon. All participants were encouraged to speak in Indonesian if they found it challenging to communicate effectively in English. In joint interviews, if one person was more fluent and confident speaking English, they would translate if the other preferred to speak in Indonesian. Both WhatsApp pilot interviews were conducted entirely in English as well as two focus groups, seven joint interviews and three individual interviews, all on Java and Bali Islands. In total, 20% (*n* = 24) of participants chose to speak English.

Several participants in Wolowea were more comfortable speaking in their local dialect, so one of the two (non-English-speaking) village midwives translated from

Wolowean to Indonesian and SH translated from/to English and Indonesian. SH does not speak Wolowean. In an effort to reduce the layers of translation during interviews, SH conducted four interviews on my behalf – eliminating translations to English – alongside the midwife/translator. During these proxy interviews, I observed and recorded field notes regarding the participants' environment, interactions with their children and interviewers, and their emotional cues throughout the interview. My presence also allowed SH to consult with me about any questions for follow-up probes.

All recordings were uploaded and saved in a password-protected account provided by Indiana University, and fully transcribed by two paid Indonesian translators. Transcriptionists also provided commentary on discrepancies in spoken translations as well as cultural references.

Data Analysis

Data analysis was conducted through Quirkos, qualitative text analysis software. Interview data was coded into primary and secondary level codes and analyzed using an iterative approach (Tracy, 2013). This inductive constant comparative analysis was informed by concepts from PI theory, comparing emerging themes to findings from previous PI research (similar to Matthias, 2009). PI theory served as a source of sensitizing concepts, which merely suggested directions for analysis rather than providing *a priori* codes or themes for the data (Blumer, 1954). It is important to note that data analysis, particularly at the primary or open level, was not limited by PI theory, but rather driven by the data. I guarded against bias toward PI by verifying accuracy of my interpretations with several key informants and triangulated the data across various characteristics described below.

During this initial phase, codes were identified emergently, redefined, compared to others, eliminated and combined until a set of exhaustive codes was defined. These first-level codes emerged as they arose repeatedly in transcripts. As part of the constant

comparative method, I initially coded themes by role of the speaker (e.g., mother, father, grandmother), and then I compared them with one another to determine if there were meaningful similarities and differences. I also cross-coded themes based on sources of support and stress, both in terms of the person providing support or causing stress (e.g., the baby's grandmother or father) and the issue that compelled the mother to seek support (e.g., pain, not making enough milk). Impressions from these comparisons led decision-making for defining categories – collapsing, changing labels, deleting codes. From there, I moved from open to focused coding, where incidents in the data were labeled using core themes identified in the previous rounds of open coding (Fram, 2013; Tracy, 2013). At this point, I refined the codes based on consistency and divergence with findings from previous breastfeeding literature. For example, I collapsed codes based on previous findings about the role of grandmothers and fathers as support persons. Through the entire analysis, I guarded against bias toward PI by asking questions about both positive and negative aspects of breastfeeding and support.

I compared explanations provided by individuals who played various roles in the decision-making process and triangulated the data from interviews with mothers, which resulted in a more complete picture of the phenomena (Boeije, 2002). Everyone spoke about their personal experiences, and lactation consultants and midwives also shared their general observations as professionals working with a number of women. I cross-checked emergent findings with data from different sources (e.g., mothers, fathers, grandmothers) and different locations to reveal consistencies and contradictions in the descriptions of the communication process surrounding infant feeding decisions. This triangulation was intended to lead to richer data by guiding theoretical sampling.

Throughout the inductive analysis, I compared each new instance to previously coded instances within the same category (i.e., experience with pain, grandmother's support, father's support), further developing the characteristics of theoretically driven

themes or patterns that may result from combining categories (Glaser, 1965). Concepts presented in PI theory (e.g., sources of problematic integrations and framework for coping with uncertainty) guided this cycle of comparative analysis.

Procedures to Ensure Rigor

I employed several strategies to establish rigor for this research assuring credibility, dependability, confirmability, and transferability (Houghton et al., 2013) To ensure interpretive validity and credibility (i.e., believability) (Onwuegbuzie & Leech, 2007), I utilized peer debriefing with key informants wherein they were asked to provide cultural context to stories grounded in local customs and beliefs, colloquial phrases found in transcripts, and to clarify speakers' intentions and unspoken meanings (Houghton et al., 2013). In short, I asked key informants to validate and/or correct my interpretations. I communicated with key informants through email and WhatsApp messages (and in person while I was in Indonesia) at every stage of data analysis. Throughout the research process, I discussed my observations and experiences interviewing participants with my key informants as I was compelled to understand unfamiliar interactions and comments, identify necessary changes in my approach to developing rapport and test my own assumptions during data collection. I concluded data analysis with a member-checking process, which involved participants being given a synopsis of the key research findings, asked to confirm accuracy of my interpretations (Fram, 2013). When I was unable to contact a participant, I asked key informants to provide their input.

I also reflected on negative cases (i.e., data that contradict emergent themes or call into question initial interpretations of the data) to expand and revise my interpretation of the data, facilitate development of explanations for negative cases, and maximize the credibility of the data (Houghton et al., 2013; Onwuegbuzie & Leech, 2007). I also considered theoretical concepts represented in my coding to ensure that my

interpretations were not limited or biased to the PI framework. These reflections took into account the broader context and "social embeddedness" of interactions in order to gain a holistic understanding of the issues surrounding infant feeding decisions (Nadin & Cassell, 2006, p. 216).

Reflexivity

Finally, I practiced reflexivity by documenting my observations, experiences, thoughts, and reactions during data collection in a journal (at least once per day, most often while traveling home for the evening and during breaks and meals between interviews) (Finlay, 2002). Reflexivity refers to a researcher's capacity to identify feelings and insights, and maintain transparency in decision-making throughout the research process, thus enabling the researcher to alter the research process as necessary to generate rich data (Karagiozis, 2018). This method to acknowledge the intersectionality of the multiple facets of my identity and that of my participants (i.e., age, nationality, ethnicity), our similarities and differences, is considered the gold standard for rigor and quality among qualitative researchers in a number of disciplines (Dodgson, 2019).

I came to this research with a specific perspective as an American mother who values the benefits of breastfeeding for both herself and her child. Accordingly, I breastfed my own child for 11 months and periodically supplemented with formula without any concern about water contamination, violating a federal law, or financial overburden. I faced challenges with EBF related to my child's latch and uncertainty about producing enough milk, and sought support from a variety of professionals and informal acquaintances to help me continue breastfeeding. My history and personal interests have undoubtedly affected data collection and analysis. In this journal, I reflected on these personal motivations during data collection and analysis, and my relatively privileged position (as a researcher and as a White mother from the United States) with breastfeeding as I extrapolate meaning from 1) others' stories, 2)

interactions with participants, and 3) my emotional reactions throughout the research process.

By recognizing my inevitable influence on the collection and interpretation of data, I employed several techniques of reflexivity (Darawsheh, 2014). The research journal – as a method of reflexivity – is consistent with the social constructionist approach, and allowed me to track and organize the data collection process, identify methodological issues, supplement the interview data (e.g., noting nonverbal behavior and personal environments), and recognize my own assumptions, values and beliefs about EBF and how they may have influenced the inquiry (Nadin & Cassell, 2006). Through this reflection, I was able to situate myself in relation to my research topic and explore my motives for the study. By examining the range of internal and external factors that influence my interpretation of the data, my intent was to recognize the nuance of women's decision-making about breastfeeding and develop an honest-as-possible representation of their experiences. Following Darawsheh's practical examples of using reflexivity, I remained aware of my own biases toward motherhood, breastfeeding, and a woman's agency to solve related problems.

Chapter Four: Results

Description of Participants

Across the three islands, 32 individual interviews, 20 joint interviews, and nine focus groups were conducted with a total of 84 mothers and 36 support persons. Joint interviews included a mother and her support person – either her infant's father or grandmother. Lactation consultants, midwives, and a mother's siblings as well as her child's father and grandmother(s) participated as support persons for this research. Two phone interviews, 13 individual interviews, 15 joint interviews and six focus groups were conducted in four cities (Jakarta, Cirebon, Bandung and Semarang) on Java Island (n = 87). Two focus groups, and 2 interviews (one individual and one joint) (n = 9) took place in Denpasar, the capital city of Bali Island. Lastly, 16 individual interviews and four joint interviews were conducted in one city (Mbay) and one village (Wolowea) on Flores Island (n = 24). Lastly, nine mothers participated in one focus group in Wolowea, but one was excluded from the data because she never attempted to breastfeed her baby as a result of her Hepatitis C diagnosis.

Mothers

Women were between 20 and 45 years old. Table 2 summarizes demographic characteristics of mothers who were interviewed for this research. Participants had between one and 6 children, and 76% of women had one or two children. Just over half of participants had given birth since 2017, and less than 20% of women had given birth to their youngest child between 2009 and 2013. Their children ranged in age from infancy to 20 years old. The most common place of birth (38%) was a private hospital,

followed by Puskesmas[2] (20%) and public hospitals (18%). Of the 17 women who gave birth in a Puskesmas, 14 indicated living in a rural area. Table 3 provides descriptive statistics on participants' motherhood experiences.

Table 2

Demographic Characteristics of Mothers[a]

	n	%
Age (*M*±SD)	31 ± 5.4	
Education		
Bachelor's Degree or higher	53	63.9
Associate's Degree	5	6
Senior High School	11	13.3
Jr. High School	5	6
Primary School	9	10.8
Income		
Comfortable	60	72.3
Enough to Make Ends Meet	16	19.3
Not Enough	6	7.2
Don't Know	1	1.2
Region		
Rural	24	28.6
Urban	39	46.4
Suburban	21	25
Household Size (*M*±SD)	5 ± 2	
Cohabitation	37	44
Maternal Parents	25	71.4
Paternal Parents	10	28.6
Employed	57	69.5
Type of Work		
Clerical	5	8.8
Professional	24	42.1
Agricultural	14	24.6
Sales/Service	7	12.3
Industrial	1	1.8
Other	7	12.3

Note. [a]*n* = 84.

[2] Government-funded primary health clinic. The term "puskesmas" is an abbreviation for a 3-word phrase in Indonesian, *pusat kesehatan masyarakat*, meaning "community health center". There are two kinds of Puskesmas, those with beds and those without; those without beds generally are not open after midday, and are not equipped to handle serious emergencies, particularly obstetric. Those with beds are usually in more remote areas, and are equipped for basic essential obstetric and neonatal care around the clock (U.S. Library of Congress, n.d.).

Table 3

Descriptive Statistics of Motherhood Experiences[a]

	n	%
Number of Children		
1	38	45.2
2	26	31
3	18	21.4
4	1	1.2
6	1	1.2
Year of Most Recent Birth		
2009	2	2.4
2010	3	3.6
2011	5	5.9
2012	1	1.2
2013	5	5.9
2014	8	9.5
2015	9	10.7
2016	8	9.5
2017	20	23.8
2018	23	27.4
Location of Last Birth		
Public or Private Hospital	53	63.1
Puskesmas/Community Health Clinic	18	21.4
Home	2	2.4
Midwifery Clinic	8	9.5
Maternity Clinic	3	3.6
Birth Health Care Provider		
Doctor/Obstetrician	42	50
Midwife	41	48.8
Nurse	1	1.2
Type of Birth		
Vaginal	65	77.4
Cesarean	19	22.6
Early Initiation of breastfeeding[b]	71	84.5
Offered Formula	26	30.9
Health Care Provider/Hospital Worker	13	50
Mother/Mother-in-law	6	23.1
Extended Family	3	11.5
Formula Sales Person	3	11.5
Bottled Water at Home	46	55.4
Boil Water at Home	31	86.1

Note. [a]*n* = 84. [b]Early initiation refers to the opportunity to begin breastfeeding within one hour after birth.

Support Persons

A total 36 individuals who provided support to breastfeeding mothers participated in interviews. Nine interviewees provided support in a professional capacity (midwife, midwife assistants, and lactation consultant). Table 4 summarizes the demographic characteristics of all support persons. The majority of mothers' support persons were their infant's grandmother or father, both of whom are discussed in detail below.

Table 4

Demographic Characteristics of Support Persons[a]

	n	%
Gender		
Man	23	63.9
Woman	13	36.1
Age (*M*)	34 ± 10.6	
Support Role		
Husband	22	61.1
Mother	2	5.6
Mother-In-Law	1	2.8
Sibling	2	5.6
Lactation Consultant	3	8.3
Midwife	5	13.9
Midwife Assistant	1	2.8
Education		
Bachelor's Degree or higher	23	63.9
Associate's Degree	6	16.7
Senior High School	5	13.9
Jr. High School	1	2.8
Primary School	1	2.8
Income		
Comfortable	24	66.7
Enough to Make Ends Meet	9	25.0
Not Enough	3	8.3
Paid to Provide EBF Support[b]	4	9.0

Note. [a]*n* = 36. [b] Nine respondents identified as a non-family member (i.e., lactation consultant, midwife or midwife assistant) who provided breastfeeding support and were asked whether they were paid for their support.

Grandmothers. Three grandmothers – two maternal and one paternal – were interviewed. Ages 53, 54 and 72 years old, they all lived in Semarang, on Java Island. One maternal grandmother and the paternal grandmother cohabitated with their child's family at the time of their interviews, and they reported having either not enough or just enough money to make ends meet. The grandmother who did not cohabitate with her daughter's family reported being able to live comfortably financially. Two of the grandmothers reported completing a Bachelor's degree or higher, and the other completed senior high school.

Fathers. The present data represent perspectives from 22 fathers living on Java, Bali and Flores Islands. Twenty men participated in joint interviews, one man interviewed independently from his wife (who also participated in this research), and one man participated in a focus group on Bali Island without his wife. Fathers ranged in age from 26 to 53 years old. The majority of participants earned a college degree and reported that they were financially "comfortable." Table 5 summarizes the demographic characteristics of Indonesian fathers who participated in this study.

Table 5

Demographic Characteristics of Fathers[a]

	n	%
Age (*M*)	33 ± 6.9	
Education		
Bachelor's degree or higher	17	77.2
Senior High School	3	13.6
Jr. High School	1	4.5
Primary School	1	4.5
Income		
Comfortable	15	68.1
Enough to Make Ends Meet	6	27.2
Not Enough	1	4.5
Cohabitate With Parents	11	50.0
With Wife's Parents	4	18.1
With Own Parents	7	31.8

Note. [a]*n* = 22.

Social Support for Breastfeeding

Women invariably pointed to the integral role of support in breastfeeding. As Belinda[3], a mother of one in Semarang (Java), put it, “Breastfeeding needs some struggle. We need to wholeheartedly struggle for it. Support from family plays a big role too.” Women discussed various influential support persons who contributed to or undermined their intention at birth to continue breastfeeding. A woman’s husband, both spouses’ parents, siblings, cousins, friends, midwife, and pediatrician have each been mentioned as influential support persons who contributed to a new mother’s momentum at birth to continue her breastfeeding relationship with her infant. New mothers also credited their support persons for their decisions to either supplement with formula or stop breastfeeding altogether.

There are many reasons why a mother might receive, or expect, or choose to ask for breastfeeding support from one person or another. Most often, support was provided by individuals who are closest to the new mother, either physically (i.e., cohabitating), emotionally, or both. Findings from this study indicate that the infant’s grandmother(s) and father take uniquely influential support roles in a new mother’s breastfeeding journey, which is consistent with the past several decades of research worldwide (e.g., Aubel et al., 2004; Houghtaling et al., 2018; Özlüses & Çelebioglu, 2014). Women also discussed the breastfeeding support they received (or did not receive) from various health care providers including pediatricians, midwives, and lactation consultants.

Breastfeeding support provided to new mothers may take different forms depending on variety of factors: a) the mother’s preferences and needs, b) the support provider’s willingness, knowledge, skills, and resources, and c) the mother’s relationship

[3]Pseudonyms are used to maintain confidentiality.

with each of these support people. Social support encompasses all verbal and nonverbal interactions that are intended by the support provider (or perceived by the receiver) to function to help individuals manage their uncertainty and enhance their (perceptions of) control over their experiences (Albrecht & Adelman, 1987; Ford et al., 1996; Goldsmith & Albrecht, 2011). Social support as manifested in the present-day Indonesian breastfeeding context encompassed a range, including informational support (e.g., advice), emotional support (e.g., pat on the shoulder), and instrumental support (e.g., assisting with housework or food shopping) (Albrecht & Adelman, 1984). Women who were interviewed often considered interactions with others in the immediate postpartum timeframe as breastfeeding support even if such support did not directly affect her breastfeeding success. For example, offering to wash the dishes may not directly support breastfeeding, but women discussed actions like these among a wide range of (seemingly unrelated) instrumental support in the context of breastfeeding. This variety of support may contribute to breastfeeding success by minimizing a new mother's stress about her household responsibilities and focus on her newborn's needs.

The help a new mother expects to receive after giving birth can be alluring enough to consider significant relocation to reunite with extended family. Farah explained that she and her husband decided to move from London back to Cirebon, their hometown, as they prepared for the birth of their first child. Despite fewer and lower quality health care facilities and services available in Indonesia compared to England, the help from their family was worth the move. "I considered that the support system is better, because we have both of our parents... We would have a lot of gifts for my baby and for myself from friends and family, so that will be helpful, and also we have support from our family for childcare if I'm not able to take care of my child because I [will still be in] recovery," Farah said. Their decision to move home demonstrates how much they trust their family (parents, especially) to provide the support they desire. Several women

indicated that a person's reliability and knowledge were major factors as they decided whom to turn to for support.

Participants indicated that an emotional connection with a support provider is an important consideration when deciding whom to rely on for breastfeeding support. For example, Maya (Flores) explained that she asked her mother for breastfeeding support "because she loves me." Bella (Java), 28-year-old mother of one, discussed whom she and her husband relied on for breastfeeding and general parenting advice: "It depends on how close we are with the people we ask for advice. We feel more comfortable asking... our parents, especially for the sensitive questions. I asked my sister too." Conversely, not feeling close to someone may have an equally powerful influence on a woman's decision not to seek support for breastfeeding. Maria (Java) explained why she chose not to ask her mother-in-law for support while breastfeeding her baby, "I'll choose to do it on my own... I don't feel connected to her."

First-time parents in Indonesia sometimes choose to live with their parents in an effort to save money and take advantage of the extra help with the additional day-to-day demands with an infant. Almost half (44%, n=37) of mothers who were interviewed reported that they currently live with either their parents or parents-in-law, and many other women shared that they lived with family in the immediate postpartum period. Nina, the lactation consultant in Jakarta quoted above, explained her observations from her experiences working with new mothers that demonstrates the common practice of intergenerational cohabitation. "It's a belief here, because you live with your mother-in-law or you live with your mother... everyone is taking care of you, cooking, cleaning house," Nina said. Many women on all three islands spoke of the help they received while living with their parents. One mother, Inten (Java), described the help she received while living with her parents after giving birth, "I'm very comfortable because I have my mother, my grandmother to take care of the baby so I can, like I'm very [much] enjoying

the time. I only hold my baby for breastfeeding, to change the diaper, et cetera." Another mother, Aisyah (Flores), had a similar experience at her husband's parents' home after birth. "I stayed with my parents-in-law, so I used to talk with [my mother-in-law] a lot... [and she] cooked all the food for me," Aisyah said.

New mothers who did not live with their parents still relied primarily on their infant's grandmother, but also tended to rely on a variety of other individuals for support. Ndari (Flores), who did not live with her parents and whose husband was out of town for work at the time of her child's birth, said she mostly consulted with her mother to learn how to breastfeed. "Once I gave birth, the midwife also promoted breastfeeding," Ndari added. Yuliana (Flores) lived with her husband and older children in their own home, and said her mother-in-law, who lived locally, was her primary support person, especially when she was trying to find the best position to breastfeed. Yuliana also described the instrumental support she received from her husband and mother-in-law, "After giving birth, I couldn't do chores yet, so they helped [with the] washing, cooking, taking care of the baby." While washing the dishes or cooking a meal is not breastfeeding support in its most direct sense, participants described chores and other forms of support as actions that enabled a mother the flexibility and relaxation to focus on breastfeeding. Because participants addressed a wide array of types of support in the context of breastfeeding (whether directly or indirectly related to breastfeeding), various types of support are highlighted in these findings. The following results highlight new mothers' perspectives on the various forms of support provided by different individuals.

The present data emphasize the decidedly influential yet different roles that grandmothers and fathers play in their support, or in some cases, lack thereof, related to breastfeeding practices. Notably, proximity did not always translate into effective support. The following sections explicate the various forms of breastfeeding support from these individuals. From mothers', grandmothers', fathers', lactation consultants', and

midwives' perspectives, these findings highlight a range of positive and negative breastfeeding support (sought as well as uninvited) that represents a spectrum of lessons, advice, breastfeeding successes and failures, and a range of strategies for managing uncertainties. The social and cultural nuances that are enmeshed with breastfeeding decision-making are also discussed.

Grandmothers as Sources of Breastfeeding Support (and Conflict)

An infant's grandmother was the most frequently identified source of breastfeeding support. Interviews revealed that new mothers often rely on their infant's grandmother regardless of whether the grandmother was their own mother or their husband's. Proximity and availability were commonly discussed reasons a mother relied on someone for breastfeeding support, and it was typical for a grandmother to be a cohabitant or live nearby.

Mothers in this study discussed receiving help from grandmothers to find the best positions to breastfeed and ways to avoid pain, to complete household chores, and to care for the baby while the mother rests. While there are likely differences in the kind of relationship a woman might have with her own mother compared to her mother-in-law, the grandmother's role in decision-making about infant feeding seems to be associated mostly with the extent of day-to-day contact with the new mother. For example, when asked why she relied mostly on her mother for help with her baby, Fani (Flores) said, "Because my mom is always with us." Taman (Java) reported preferring advice from her live-in mother over online information in part because of the convenience of talking with her. A grandmother's wisdom gained from experience raising her own children (and possibly breastfeeding) makes her a valuable resource for new mothers as they learn what works best for them.

Despite a grandmother's firsthand breastfeeding knowledge, close proximity and availability to provide support, more often than not, mothers who were interviewed said

that grandmothers contributed to their stress and challenges while breastfeeding, despite their support. These conflicts with grandmothers sometimes led mothers to choose formula. Several participants recognized the myths and outdated information that grandmothers often rely on for infant feeding. The three grandmothers interviewed for this research each discussed their approach to encouraging their daughters to eat certain "traditional" local foods such as juiced "young papaya leaves" with turmeric and honey to help with lactation, as Yani described. All three of the grandmothers admitted outdated breastfeeding knowledge and relied on their daughters for guidance on the best social support to provide.

Wulan, Nusrina's 72-year-old mother-in-law (Java), acknowledged that her deferential approach as a grandmother was unique compared to other Indonesian grandparents, who often argue with new parents about parenting decisions. "From my deepest heart, I love [my children]. I want them to be very happy, so that's why I never say anything... no matter if I like it or not, I must agree." The following section provides depth to the more common conflict-ridden experience between a mother and her child's grandmother.

Mothers' Evaluations of Grandmothers' Breastfeeding Support

When a woman desires one type of support, but receives another, the support may not be appreciated or considered helpful. The provider's intent to be supportive does not guarantee that the recipient will perceive it as supportive. Sri, a grandmother of three on Java, shared her feelings about supporting her daughter while she breastfed, "As a grandmother, the feeling for helping is always there... I would be happier if I could help more." She acknowledged the fine line between being supportive and being a hindrance. Sri recommended that new grandmothers, "make an effort to say positive things." She went on to say, "If you help, make sure that you're just helping, not interfering with her [daughter's] family matters." Sri was unique among participants for

her self-awareness and insight into the potential for her support to have unintended consequences.

A new mother's evaluation of the support she received with respect to infant feeding in the postpartum period seems to depend on her expectations and desires regarding how to feed her infant. A mother who works outside the home may have very different goals for breastfeeding her child, thus different desires for the type of support she receives. The following two examples juxtapose two mothers' reactions to similar breastfeeding support. Nina, an upper middle class mother on Java Island, disregarded her mother's suggestion to supplement with formula because she wanted to exclusively breastfeed and believed she could. She was adamant about her breastfeeding goals with her first child and described how she responded to her mother's unwelcome input:

> My mom, she always [said] whenever my baby cries, "Oh maybe she's hungry. Your milk is not enough." But she's never said anything more than that because I said, "No, mom. I want to breastfeed. Let it be. Leave me alone on this."

Years after her first child was born, Nina became an International Board Certified Lactation Consultant and is a founding member of Indonesian Mothers' Breastfeeding Association (AIMI). Nina's position as a certified support person for mothers demonstrates her commitment to breastfeeding that was reflected in her response to her mother's advice. Her role as a founding member of the largest breastfeeding peer support network in Indonesia also highlights her dedication to helping other women achieve breastfeeding success.

On the other hand, Linda, a mother on Flores who indicated her family was "barely making ends meet" financially, was appreciative of the support she received from her family to feed her infant with formula so that she could return to work as a middle school math teacher about one month after birth. Linda explained, "I have a good support system... While I am working, my baby is with my parents and they feed my

baby with formula, waiting for me to come home [to breastfeed]." These two examples demonstrate that the women had drastically different desires and expectations for infant feeding support, and that difference may be based on their families' financial needs. Nina's socioeconomic status afforded her the privilege to refuse her mother's offer to supplement and committing to breastfeeding despite its demand on her time. In Linda's case, her financial needs superseded her desire to breastfeed and led her to welcome her family's help to supplement. While these two women reacted differently to their family's support, both women recognize the value of breastfeeding. Linda reflected on her obligation to work and its incompatibility with breastfeeding.

> I felt very heavy. Giving my baby formula was a dilemma for me, but what can I do?... Before my baby was born, I had been thinking about [breastfeeding]. I was thinking how it would be once I got back to work, and how I would hike to school every day.

Considering the logistics of Linda's work obligations and transit to and from work, she concluded that successfully breastfeeding exclusively while working would not be possible. This conclusion reinforces Linda's appreciation to her family to step in and feed her baby with formula while she was at work. However, the dilemma Linda refers to highlights her negative feelings about feeding her baby with formula, and she expressed her regret as she spoke about her interest in feeding her future babies exclusive breastmilk. "Lately I've been thinking about if I am being a good mother to my baby," Linda said while she cradled her four-month-old daughter. "Not maximally," she shared as she evaluated her performance as a mother. While she criticized her own mothering in light of feeding, she separated her evaluation of herself and her family. Even though she said she is not being the best mother by allowing her baby to be fed with formula, she still considered her family who was feeding her baby the formula to be helpful.

Practices That Undermine Breastfeeding

Many women identified grandmothers' unwanted or unhelpful advice and criticism as prominent breastfeeding challenges. Even more concerning, some grandmothers explicitly advocated for formula feeding against medical recommendations and the new mother's wishes.

Grandmothers oftentimes, in their efforts to offer support, undermine the natural process of breastfeeding. Citra and her husband Henry (Java) shared that his mother's support had an unintentional negative effect on Citra, who was in her mid-20s at the time of her child's birth. "My mum didn't breastfeed," Henry said. Citra further explained that her mother-in-law believed that breastfeeding was not "something every woman can do." As a result, in what may seem to be an effort to provide emotional support, she told Citra, "'Don't push yourself too hard. If it doesn't come out, you can always use formula'." Expressing her determination to breastfeed her baby, Citra answered her mother-in-law: "I know I can do this." While the grandmother's intent for her comments are unknown, Citra's choice to discuss this incident during our interview about support for infant feeding decisions, and her explanation that these comments made her feel "anxious" about breastfeeding successfully, suggest that Citra perceived it as a failed attempt at support.

Sulli (Bali) had a similar experience with her mother-in-law who moved in for a few weeks after her grandson was born.

> My mom-in-law would say every time he cried, "Oh, let me prepare the formula." I was like, "No!" It was a bit emotional... I know she was trying to help, and I think she was worried, so [she would ask], "Should I prepare the formula?" [And I said], "No. Let me breastfeed. Let me try." And she would be okay and she'd sit beside me and look concerned.

While Sulli told her story during a focus group, Kevin, a father also on Bali, interjected validation that this type of experience is common for new parents. He said, "Standard mom-in-law, actually." The consequences of a grandmother's support in the

form of offering formula as a substitute may be far reaching. In reflection, Sulli shared how her mother-in-law's concerned looks made her feel.

> It made me feel like maybe I can't [breastfeed]. Maybe it's better [to give formula]. There's a second guess, right. Is this the right decision? Am I torturing my baby by trying too hard [to breastfeed exclusively]? Or what if [my breastmilk] never comes out?

Based on her experiences as a lactation consultant, Nisa (Java) explained the counterproductive influence success grandmothers may have on breastfeeding, particularly as a result of multi-generational cohabitation in Indonesia:

> Everyone is doing it for you, feeding, even holding the baby... some grandmas take the baby so the mother can rest. Sometimes you can sleep [with your baby], but at night, that's another excuse for the grandmas [to take the baby]. They don't know, it's not their fault. I believe they think it's not wrong. [They think] 'It's not harming the baby. I'm helping my daughter-in-law.'

According to UNICEF (2019), direct physical contact between mother and newborn, widely known as skin-to-skin contact, is optimal for establishing and maintaining a mother's milk supply by stimulating hormones that support lactation and maternal bonding. This tradition of well-intentioned grandmothers holding newborns instead of their mothers may inhibit a woman's ability to breastfeed successfully. The extended example below highlights the grandmother's role as a supporter as well as an unintentional barrier to successful breastfeeding.

Rika, 29-year-old mother of three on Java, and her mother, Sri, shared the struggles they both faced feeding Rika's first baby, Steven. They explained that he was eventually diagnosed with a tongue tie[4], the reason they believe he would not latch correctly in his early infancy. Steven was bottle fed both breastmilk and formula during

[4] Ankyloglossia, commonly known as a "tongue tie," is a congenital defect of tissue under the tongue that affects its shape and/or restricts its mobility, inhibiting an infant's suckle, and is associated with breastfeeding problems (The Academy of Breastfeeding Medicine, 2004).

the first six weeks of his life as Rika worked to establish sufficient milk supply through a process known as relactation[5]. Rika was able to breastfeed her son until he was two years old, after Steven transitioned from a bottle to spoon to eventually latching directly to his mother's breast. Rika reflected,

> I was pissed, angry, cranky all the time. Baby blues, I guess. I screamed at my baby, like why couldn't I breastfeed? And I was angry at my parents... because they were sneaking by the door [checking on me]. I felt so stressed.

Sri added her perspective as a grandmother, "The baby cried all the time, but every time she breastfed him, he didn't suck... I was okay about feeding formula temporarily while she [Rika] tried to produce breastmilk." Rika went on, "She [my mother] once said to me, 'That's okay, we have formula." And Sri clarified, "No, not like that. This baby boy cried every day, and I felt sorry [for my grandson]... so I said that it was okay to have formula temporarily... But I would have still supported [my daughter] anyway if she chose to breastfeed instead." Despite Sri's intent to support Rika through her breastfeeding challenges, Rika felt intense emotional distress at the time, but recognizes her mother's significant role in helping her finally establish a positive breastfeeding relationship with Steven. Rika explained, "During the relactation process, Steven kept crying from morning to afternoon... He completely refused [to latch]... all my neighbors complained about him, [because] they couldn't sleep." So that she could sleep, Rika said her mom carried Steven while he cried through the early mornings. She went on, "At night, he slept on top of me, [but] I didn't carry him during the day." It was Sri, Steven's grandmother, who weaned him from using the bottle by spoon-feeding the breastmilk. While Rika said she considers her mother's support helpful, it is possible that Sri's

[5] Relactation is a process a mother undertakes to re-establish her milk supply after a breastfeeding interruption that caused a decrease in her milk production. See Australian Breastfeeding Association website (2018) for a list of strategies for relactation.

involvement may have further complicated and lengthened the relactation process by interrupting the mother-child skin-to-skin contact necessary for breastfeeding. This example highlights the complexities of breastfeeding support – where one act of effective support (e.g., help with weaning from the bottle) may also inadvertently create new barriers (e.g., less oxytocin and prolactin hormone production as a result of less skin-to-skin contact between mother and baby).

Tasya (Java) also described an emotionally difficult time while living with her family, which actually led her to move out. She said, “When we lived in my parents’ house... I didn’t get the support that I needed, the emotional support from my parents, and [they] pushed me to the edge.” Even though her parents did not suggest using formula, Tasya felt like the stress was too much to bear.

> Every time my child cried, [they thought] I must immediately breastfeed. I couldn’t do that, because of the pain I experienced after my C-section... My parents couldn’t understand that... [they] got angry, so I decided I had to go home to my own house.

In hindsight, even though she and her parents were in favor of breastfeeding, Tasya did not want the type of support her parents offered. “I didn’t want to live in my parents’ house... We [my husband and I] are both very independent, so too much help is stressful for me... They always push and I don’t need it.”

Criticism. Grandmothers’ attempts at support may come in the form of criticism, which often caused conflict for mothers. Criticism, while not considered to be supportive by most recipients, is sometimes coupled with advice that the grandmothers may have intended to be helpful. This ineffective support contributed more stress and conflict in new mothers’ lives, which had the potential to harm chances of breastfeeding success. Novi (Java), first-time mother in her early 20s, recalled her challenges with insufficient breastmilk production that led her to supplement with formula after her infant did not gain weight for two months. Novi was in the middle of her college education when she gave

birth, and she returned to complete her classes soon after. Several individuals in her life played an influential role in how she felt about her situation. Early on, her mother-in-law criticized the size of her infant and said that “no one wants a small baby,” insinuating that Novi’s baby was too small, an indicator of malnourishment, as a result of not receiving enough breastmilk. Novi decided to supplement breastfeeding with formula, eventually leading to exclusive formula feeding. She also shared that her mother-in-law later described Novi to extended family and friends as her only daughter who “doesn’t breastfeed.” It seems no matter what Novi did to feed her baby, she could not escape her mother-in-law’s criticism. Novi recounted the conversation she had with her mother-in-law, “As a mother, I tried terribly hard and you weren’t here for me...” In this quote, “here” refers to both physical and emotional availability to provide compassionate and encouraging support as Novi established her new routine as a mother. According to Novi, her mother-in-law is not entitled to criticize her decision to supplement with formula since she did not provide support for her breastfeeding success. Novi also described her mother’s support, which was drastically different from her mother-in-law’s, “My mom said, ‘As long as your baby is healthy, it’s okay... You’ve tried your hardest’.” Even though Novi received the emotional support she needed from her mother, she acknowledged that sometimes encouragement to breastfeed also transforms into a lack of support for feeding an infant formula, as it did with her mother-in-law. This either/or – good/bad – orientation to infant feeding methods can be problematic for new mothers as they grapple with uncertainties surrounding breastfeeding, and determine the best approach for themselves and their baby.

For some grandmothers, breastfeeding is the only acceptable way to feed an infant, but they fail new mothers by criticizing their efforts. After Putri (Java) suffered pain while breastfeeding for three months postpartum with her only child, she and her husband Ahmad became members of the Indonesian Breastfeeding Mothers’

Association and attended a breastfeeding class hosted by the organization. Even though Ahmad said they were satisfied with what they learned to overcome their challenges as well as prevent future problems, Putri said her mother criticized their approach:

> When I went to [a breastfeeding] seminar [for new parents], my mother was like, “You know, kids nowadays... too much talking, no action. You don’t have to go to seminar... just go and breastfeed [your baby].” She didn’t care about my pain. It was not a good situation.

Putri was able to exclusively breastfed for six months. She discussed another frustrating time with her mother in the beginning when she wanted emotional support, but instead received criticism for her inability to push through the pain. “Whenever [the baby was] crying, I was crying while breastfeeding my baby... I needed a pat on the shoulder... but [my mother] didn’t give me that.” Putri reflected on that conversation, and said her mother made her feel like she was “all to blame” for the problems she was experiencing. “I was desperate. I felt really down... And I felt like... I cannot be a good mother because I cannot handle the pain,” Putri said. Even though her mother was encouraging her to breastfeed, her mother’s lack of emotional support, which manifested as criticism, damaged Putri’s confidence and evoked negative feelings about her ability to breastfeed.

Lack of support and criticism, as demonstrated in Putri’s case, may erode a woman’s commitment to her breastfeeding goals. Putri’s pain was a symptom of mastitis, an infection that has potential for disrupting breastfeeding if treatment is not received at the onset of symptoms. Her mother’s dismissive reaction was not supportive of Putri’s breastfeeding success. Putri said that her mother did not believe that different positions mattered for resolving pain. “All she knew was every position was good, no matter if it hurt or if it’s painful. Is it enjoyable? Relaxing? She didn’t really care,” Putri recalled. She added that she finally found helpful information from her sister-in-law, who

was much younger than her mother. “With the elders, it’s like, … ‘You have to do this [even if it hurts]. It’s your duty, your responsibility.’ No support.”

The Myth of the Hungry Crying Baby. Many grandmothers provided counterproductive advice for various unfounded reasons. Ratih, a midwife in Jakarta who also has three children, shared her observation about the role grandmothers may have in new mothers’ decision-making about breastfeeding. “Sometimes the [grand]parents dominate [new mothers], forcing them to give formula because the baby cries,” Ratih said. Ratih’s remarks highlight a common misconception that an infant crying means that they must be hungry and dissatisfied with their mother’s breastmilk, which is not always the case.[6] Another lactation consultant on Java Island, Icha, shared a concerning observation of the negative influence of grandmothers’ support on a new mother’s decisions regarding infant feeding:

> Sometimes [new mothers] already understand [the importance of breastfeeding], but they are having their first child, and they still live with their families, so [they have no choice], because [the grandmother might say something like], “Oh, your baby is still crying. You have to give them formula!” Even though she knows the knowledge, but the pressure of the family decided for her.

Icha’s characterization of a grandmother’s interpretation of – and reaction to – a crying baby is reflected across participants’ accounts of their experiences. In this instance, a grandmother’s support is focused more narrowly on stopping the baby’s cry instead of enabling the breastfeeding relationship.

Living together often compounds the role a grandmother may take as a support provider. Cohabitating grandmothers often see what happens overnight. Sella (Flores), a

[6] The reasons a breastfed baby may cry are diverse, ranging from rather mild problems like stomach discomfort or wanting to be held to more serious problems like reflux disease or allergies. Crying because of hunger is only one reason among many (La Leche League Great Britain, 2015).

24-year-old mother who lived with her parents, described her experience with her mother:

> The baby was crying really hard [overnight] and my mother accused me of not feeding the baby until she was full... I felt guilty and was blamed for something that wasn't my fault. I always woke up in the middle of the night to feed my baby, so I personally didn't want to be accused of such things.

Gabriella, a 27-year-old mother on Bali Island who is also a licensed medical doctor, shared her experience, which underscores the strength of a grandmother's influence, oftentimes even when the grandmother's advice directly contradicted her own knowledge as a physician. She said,

> I usually educate my patients about pregnancy and kids, but it's really different when I experienced it myself... There's a lot of myths around our family about if your breasts are small, then you cannot breastfeed... You have to eat this and this and this so your milk will be a lot. Kinds of leaves, kinds of vegetables... Even if you don't like it. If it makes you vomit, you still have to eat it... It made me depressed. And I know that until 3 days after delivery our milk is not completely out. I know. I am a doctor, but my parents and everyone around me said, "It won't be enough for your baby, so you have to give... formula"... That was quite hard for me.

Despite her formal medical education, Gabriella's expertise and breastfeeding knowledge did not seem to matter when she became a mother, and her support network relied on their own experiences and age-old beliefs to push formula supplementation.

Winda's (Java) story demonstrates that grandmothers may undermine breastfeeding more directly than through advice or criticism. Before Winda gave birth, her mother "already bought formula, just in case my breastmilk won't come out." Even though Winda was committed to breastfeeding her child, she acknowledged how challenging it was to convince her support network that breastmilk is the best option.

> Breastfeeding is not only about being stubborn sometimes, but it takes courage, bravery, and also faith on your side... It takes time to ensure people who are closest to you [that you can breastfeed]... You have to be patient, but what you are standing up for is worth it in the end. When you see your child is growing... you will see that what you are struggling for is worth it.

Winda's reflections on breastfeeding highlight the complexity of some women's need, not only to breastfeed successfully, but also to convince her family that she can be successful. Like Winda, many women discussed the unwanted support they received from their infants' grandmothers addressing a range of conflicts.

Supplementary Feeding. Oftentimes, a mother relies on her infant's grandmother, father, or nanny to provide support in the form of feeding the baby breastmilk on her behalf. Farah (Java) had help from multiple supporters after she underwent a cesarean section:

> When I was in the hospital, I couldn't move and I had to breastfeed my baby... I put the [breastmilk] in a teaspoon, and asked my sister to feed my baby held by my mother. Can you visualize that?

This popular form of breastfeeding support provides a new mother freedom to return to work or school and flexibility to schedule her day irrespective of her baby's feeding demands. Leading international breastfeeding resources provide guidelines for proper supplementary feeding[7] to ensure the baby and mother can maintain a healthy breastfeeding relationship. La Leche League International (2019), a worldwide mother-to-mother breastfeeding support organization, states that one of the best ways to minimize nipple confusion[8] is to feed the baby expressed breastmilk with a spoon or small cup. While many grandmothers were enthusiastic to aid with supplementary feeding, they were often resistant to mothers' requests to use a spoon or cup instead of a bottle for supplementary feeding, contradicting expert recommendations. Intan, a mother on Java, shared that she taught her mother-in-law to feed her baby breastmilk

[7]Supplementary feeding a breastfed baby includes expressed breastmilk, and international guidelines recommend avoiding a bottle and state that it is preferable to give expressed breastmilk by cup or spoon to optimize breastfeeding success (BFHI Australia, 2009).

[8] Nipple confusion is a term commonly used to describe a newborn's struggle with switching between a bottle and breast for feeding (La Leche League International, 2019).

with a spoon so that she could visit her husband in the hospital as he recovered from surgery. “She was like, ‘Uh, c’mon. It’s too difficult.’ But I’m really fortunate I have her, because she respects my choice and finally [said], ‘Okay, it’s hard, but I will do what she wants’.”

Winda (Java) described a similar conflict with her own mother who was not interested in feeding her grandchild with a spoon, but preferred the efficiency of a bottle. Winda sought advice from her lactation consultant Shinta on how to convince her mother to use the spoon instead of bottle while she was at work. Shinta, also a mother, explained that there is a cost for every decision in the breastfeeding context, leaving it up to Winda to decide what is most important. Winda recalled not feeling judged by her lactation consultant and appreciating the leeway to decide what was most important to her when it comes to feeding her baby. Winda decided her most important priority was that her daughter received only breastmilk for the first six months. Since she returned to work after three months and resorted to pumping while at work, she allowed her mother to feed the expressed breastmilk with a bottle.

Nurul (Bali) said she wished she knew about nipple confusion before she gave birth to her only child. Her mother offered support to give Nurul a break.

> My mom would give the baby a bottle [of my breastmilk]. One day [my daughter] just didn’t want my breast anymore, and I didn’t know that I can get help for that, so I just let her use the bottle. From then on, I expressed my breastmilk like 10 times a day.

Nusrina (Java) explained that she felt it was better to avoid the risk of a nursing strike by not bottle feeding her baby, which is why she was encouraging use of a cup or spoon, but the grandmother was insistent on feeding the baby with the bottle. Nusrina shared her experience, “At first, I tried to give [my mother-in-law] a feeding cup or spoon to be given to my baby, but last time [she] used a bottle, so I just let it be.” Even though Nusrina and her mother-in-law both stated that they do not argue about feeding

decisions (quoted on p. 60), Nusrina said that her husband spoke to his mother on her behalf.

Ratu (Java) returned to school to finish her master's degree "as soon as possible" after giving birth. While her mother refused to use a spoon, she also added formula, which is another form of supplemental feeding. She described her struggle with her mother's support:

> I didn't have enough breastmilk and my mother was not persevering. [She said, 'It's] so difficult to give the baby breastmilk with a spoon'. It's easier with the bottle, [so] at night when I breastfed [my baby, she went on a] nursing strike. My baby was crying overnight, and then my mother told me, "Don't be so idealistic. Formula is okay. It makes [it so] your baby can sleep well so you also can get rest." So, she bought formula and gave it to my baby...

Ratu explained that she felt she had no other choice but to follow her mother's advice, because she needed her mother's help while she was finishing her degree. She also said she felt she had no other support, because her husband, who was working in another city at the time, was not well-informed about the benefits of breastfeeding. When Ratu's baby cried through the night, her "husband was not there [to help], and my mother kept yelling at me, 'Give formula! Give formula!' It made me depressed." Ratu went on to describe her husband's reaction to her mother's pro-formula stance:

> When my mom encouraged me to give formula, he just said, "Okay, just give her formula." And then I said, "No, we couldn't just give her formula!" I was so angry at him and handed [him a breastfeeding brochure. I said,] "This! Read this!"

Because Ratu "read a lot" and knew that breastmilk was better for her baby than formula, she was conflicted about the support her mother was providing. "I [was] always crying when I gave my baby formula. I felt guilty..."

Mothers' Reactions to Grandmothers' Breastfeeding Support

In light of the variety of ways a mother may respond to the type of breastfeeding support her child's grandmother provides, the following two sections highlight common approaches participants discussed. The dichotomy between avoidance and acceptance of a grandmother's advice may be representative of a variety of issues including a mother's lack of knowledge, lack of options for alternative support providers, feeling helpless, beliefs about showing respect for one's elders, or her commitment to her breastfeeding goals.

Avoiding Unwanted Support. Given the degree to which most mothers discussed grandmothers' support during interviews, the negative influence of unwanted and counterproductive support is undeniable, even if sometimes benign in a woman's overall breastfeeding success. As long as grandmothers rely on their limited experiences and folkloric misconceptions, new mothers will be managing conflicts that arise from unwanted advice. One of the strongest themes to emerge from the data is the stress and distraction new mothers manage as a result of the grandmothers' involvement. Some women moved out of their parents' homes. Like Tasya (quoted, p. 67), Lastri (Java) was happy not to live close to her family, "I live far away from my extended family. My mom passed away, and my in-laws passed away. Lucky me, there was no intervention from either side in raising my children." Other mothers were content cohabiting with grandparents (possibly as a financial necessity), but changed their behaviors to avoid receiving unwanted advice or criticism from their infant's grandmother. Farah (Java) spoke of conflicts she had with her mother as she explored different ways to hold her baby to relieve her pain while breastfeeding:

> Sometimes she doesn't think the position is safe, or [she'll say], "that's not good enough for baby, you will harm the baby, you make the baby uncomfortable," something like that. That's alright... I have to close the door and figure it out by myself.

Farah found a way to exclude her mother by moving to another room while she explored techniques for breastfeeding. Annisa (Java), mother of two, used the same strategy to avoid her mother's criticism. "When my child was crying, [my mother would say], '…Your milk is not enough'… I had to go to my room and lock the door, and I breastfed [alone] so I could calm myself down."

Aside from the actual challenges of breastfeeding, avoidance, as a form of resistance to criticism, could be too much to bear. "Even though you're in the family, you're the only one breastfeeding... [so] you can feel isolated," Farah added. The stress caused by vocal grandmothers – and the perceived costs of avoidance – may lead to isolation as Farah suggested. This stress has the potential to influence a mother's decision to stop breastfeeding exclusively or altogether.

Women in this study discussed a wide range of strategies for avoiding unwanted support, spanning from avoidant and passive-aggressive tactics to aggressive approaches. Some women chose not to address their disagreement at all. Taman (Java) described a conversation she had while living with her mother-in-law. "She once said, 'Your confidence is really low. The breastmilk you produce is little too. Don't you think the baby will need... formula?'" Taman expressed her frustration with comments like these. "I just said okay, but didn't actually listen to her... I just nodded every time," she said.

Similarly, Novi's (Java) mother-in-law tried to forbid her from eating fried egg and hot chili while she was breastfeeding, citing the threat of burning the baby's tongue or upsetting the baby's stomach. "I don't understand. It is such backward thinking. My husband also wondered why, but we decided not to listen to it." Even though she did not follow the advice, she chose not to directly address her mother-in-law about their disagreement to avoid conflict. "I just said yes... I was afraid I would break her heart."

Winda (Java), on the other hand, was assertive with her mother and directly addressed the conflict when she suggested supplementing with formula after criticizing her decision to pump her milk in preparation for returning to work. Winda's mother also expressed concern about the small amount of milk Winda was able to pump during the first few sessions, among other complaints.

> My mom kept asking, "Why do you keep pumping and nursing? Isn't it tiring for you?" I said, "Mom, every mother in this world wants to give the best for their babies. Maybe in your age, at your time, you prefer only nursing because... there was no pumping device that was safe enough..."

Winda lamented about the challenges her mother's "interventions" presented her. "It takes so much patience, like to have faith in myself to successfully breastfeed my child."

Nina (Java) was also adamant about her breastfeeding goals with her first child and addressed a conflict directly with her own mother (quoted on p. 61), telling her mother to leave her alone. Fortunately, Nina's mother respected her wishes, "She's not very interfering, so I'm glad." Following a disappointing and unsuccessful effort to breastfeed her first child, Icha (Java) was more proactive in the kind of advice she would accept from her mother for her second birth: "I told her, 'Don't tell me what I have to do. You only have to be my supporter, okay?'" By supporter, Icha was characterizing a follower who provided only the support that she requested.

Putri and her husband described tense arguments that she had with her mother while she lived with the young family during the first few months after birth. Her husband said, "They were arguing and making more tension... [Her mother] was blaming her for anything. Maybe because she was not doing it in the same ways [her mother] did." Putri took a notably more aggressive approach to resisting her mother's unwanted advice and criticism than other women in the study.

Very few participants described such aggressive interactions between themselves and their mothers. However, women in this study tended to disagree directly

more with their biological mothers (e.g., Nina asking her mother to leave her alone) and circumvent directly addressing their mothers-in-law (e.g., Novi choosing not to follow her mother-in-law's advice despite never expressing her disagreement).

Mothers Use Proxies to Disagree with Paternal Grandmothers. Karina, a 30-year-old mother of two in Semarang (Java), explained this phenomenon. Karina said that the first reason she did not directly address her mother-in-law when she learned that her mother-in-law fed her baby formula against her wishes was because she lived in her mother-in-law's home, and it would be disrespectful to disagree with an elder. She went on to say,

> The second [reason] is due to our Eastern culture. When you confront your mother-in-law, it would be rude. We know that if their own children confront them, [mothers] will forgive their children the next day... That wouldn't apply to me. This culture is my burden. I couldn't fight back.

Citra felt similarly, "I was not really confident in defending my own opinion to his parents... because we were only married three months when I got pregnant." As a newlywed, Citra did not have enough time to build rapport with her parents-in-law, so she relied on her husband to advocate on her behalf.

Beyond simply disagreeing with a grandmother's advice, other mothers had to address a grandmother's behavior that had potential to cause harm. Maria's (Java) mother-in-law disrupted the demand-and-supply cycle of breastfeeding when she fed her newborn grandchild banana, a local custom that contradicts present-day international medical advice to restrict infant feeding exclusively to breastmilk for the first six months. Maria relied on her sister-in-law while her husband was out of town for work to communicate with her mother-in-law about the conflict:

> My mother-in-law gave her banana when she was just one month old. I was angry, because I knew it wasn't the right time for her to eat that kind of food... I tried to talk to [my sister-in-law] so she could help me pass it on to my mother-in-law. Finally, [my mother-in-law] understood.

Maria was successful in addressing her disagreement with her mother-in-law through a proxy whose relationship with the grandmother meant it was more socially acceptable to express conflicting views.

However, a few mothers did acknowledge the grandmother's willingness to learn and update her knowledge. Intan (Java), mother of three, explained how she was able to receive the help she needed:

> My mom-in-law always went to the pediatrician [with me], so she heard what [the doctor] says... you have to breastfeed for two years and about the cup instead of the bottle... So, it's not me telling her, but the doctor telling her.

Intan, who worked professionally as a psychologist in Jakarta, was able to preserve her relationship with her mother-in-law by relying on a third-party expert who carries more credibility in the context to persuade her mother-in-law to provide the kinds of support Intan felt she needed to breastfeed successfully.

Utama, a lactation consultant in Jakarta (Java), discussed the challenges new mothers face with support provided by grandmothers in more general terms:

There's not enough support... from the families... because these myths, old wives' tales about breastfeeding and they don't have the correct information for breastfeeding... Most of them don't know how to, [or] what is really the benefit of breastfeeding, [so they'll say] "Don't push yourself." The grandmother or husband [will say]..."If you can't, okay then." That's kind of discouraging for new moms, and they are stressed because of that.

Although grandmothers were discussed most commonly, grandfathers occasionally played a role in a woman's decision-making about breastfeeding. Gabriella shared a unique experience as she responded to the support she received from her father. She credited his status as a medical doctor (a neurologist) for his role in the conversations about breastfeeding his grandchild. Gabriella explained that her father "interrupted" breastfeeding, often suggesting that she supplement with formula. "He

wants the best for [his granddaughter]. I was a little bit of a stonehead at the time. [I said], 'No, I can do it. I can do it'... When she got a fever, I surrendered." Gabriella's baby began to develop symptoms of jaundice[9], which led her to take her father's advice and use formula despite her pediatrician's recommendation to continue with exclusive breastfeeding.

> My [father called] my pediatrician. My doctor said to just slow down, the breastmilk will come... But my father just kept calling, so my doctor finally said, "Okay, give her formula." Because of my father... my doctor felt intimidated, so she gave up.

Gabriella, a primary care physician herself, suggested that her father abused his position of power. She explained that his seniority as a health care professional, as much "more senior than" her pediatrician, stifled the possibility of true dialogue about what was best for the baby. As a result, Gabriella's doctor might have felt pressured support her father's suggestion. Despite Gabriella's medical training, she relied on her pediatrician: "I am the mother. I'm not the doctor [in this situation]. I can't think straight… So I needed a second opinion, and the doctor's [judgement] was… infected by my father."

Gabriella's husband Rudi also explained that his father-in-law had a "high position in the hospital," indicating a power imbalance between him and the pediatrician who was advocating for breastfeeding. Rudi went on to describe the cultural context for understanding this conflict. "It's kind of different [in Bali] than what I see in the States. It's okay to say, 'This is not your field…' [to someone like Gabriella's father in the U.S.], but in Bali… you have to be careful to not say that, because it might mean you're not going

[9] Jaundice is a common condition among newborn babies that is widely recognized by yellow skin that results from the biological adjustment to life outside the womb. In rare cases, prolonged jaundice may damage the brain and nervous system. Risk factors for jaundice include exclusive breastfeeding problems and East Asian race (Flaherman et al., 2017).

to talk to each other for years." Gabriella continued to breastfeed her infant and supplement with formula for the first six months, then relied on solid food and formula.

Relying on Ill-Informed Support. Some women were not able to resist the unwanted and undermining influence of their infant's grandmothers, particularly if they were first-time mothers. Among them were mothers who followed misguided advice simply because they did not know any better. Nisa (Java) recalled a mistake she made with her first baby on the basis of her mother's advice:

> She said I should breastfeed, but she said that I won't be able to breastfeed in the first days after the baby was born, so it was common knowledge that we have to feed them with formula on our first days... so that's what I did.

Nisa said she knew her mother had good intentions, but her mother's advice to use formula for the first couple days of her infant's life resulted in more problems than she expected: delayed milk production, her infant's dehydration at one week old, and prolonged pain while breastfeeding. She admitted that her experience breastfeeding her second child was much more enjoyable than her first. Nisa attributes this improvement to the knowledge on breastfeeding she gained in her training to become a lactation consultant between her first and second births.

Sella echoed this sentiment and explained that she felt she had no choice but to follow her mother's advice when she gave birth. Sella relied solely on her mother for information about feeding her infant, and she admitted this was partly because her pregnancy was unexpected and she was more focused on her college coursework than preparing for parenthood. Sella let her mother make all of the decisions about feeding her infant, and she explained that her mother had "more experience, and this was my first child, so I knew nothing. For the first month, I didn't even know how to carry the baby. [I] felt so uncertain and afraid, so I trusted my mom."

The lack of knowledge a new mother may have about parenting in general, as demonstrated by Sella's comments about her uncertainty and fear, may lead some women to follow the grandmother's ill-informed or misguided advice, even if it contradicts her personal goals, in order to preserve her support community.

Many grandmothers, like Sella's mother, criticized the new mother's breastfeeding efforts, creating conflict and profoundly negative experiences. Even if a grandmother's input is intended to help a mother breastfeed, there is no guarantee a mother will perceive it as helpful, and there is a wide range of experiences and knowledge gaps that contribute to conflicts.

In times of conflict and uncertainty, many women discussed their gratitude for having more than one support person; aside from their child's grandmother, fathers were commonly discussed as breastfeeding support persons. The following section describes the role of fathers in a new mother's breastfeeding success and challenges.

Fathers as Sources of Breastfeeding Support (And Conflict)

Lindang (Java), like most mothers in this study, said that mothers need to be supported by those closest to them, namely their husbands. The 31-year-old mother of three made her point clearly, "The success of breastfeeding... not only lays on the mother." Icha (Java) had a similar point of view. She was direct with her husband about his role as a support person, "I asked, you know, because this is our child, not only mine just because I'm giving birth." Alongside grandmothers, fathers often played pivotal roles in a woman's breastfeeding success. Novi (Java) described the ideal scenario, "Since day one, my mom and husband were always there beside me... [they] would help me pump my breast while I was breastfeeding my baby on the other breast," she said. However, what is unique about Novi's experience is that both the father and grandmother provided support she valued.

Often, the value of a father's support increased as women realized their infant's grandmother was not as supportive as they wished. Several women described their husband's support as filling a void left by the lack of support (or counterproductive support) of the grandmothers. Putri attributed her breastfeeding success to her husband's support despite her mother's lack of support and mother-in-law's advice to use formula, "At first, I wanted to give up, but my husband kept on [saying], 'C'mon, you can do it! I know you can do it. There must be some way we can make it through'."

Like Putri, Tasya (Java) had a similar perspective on her husband's support in light of the lack of support from her parents. Speaking of her husband Daniel, she said, "He gave me a lot of emotional support when I was this close to giving up... My parents pushed me to the edge, and my husband protected me emotionally." From Daniel's perspective, he did not "do much" to support Tasya. "I only watched in silence. I only gave her moral support, because I didn't quite understand breastfeeding and the pain... A man can only watch and pray."

A father often supported his wife during conflict with his parents when they suggested formula, provided outdated advice, or promoted myths that undermine breastfeeding. "He does the cool, calm, and composed part, and I'll do the panicking," Citra (Java) said about her husband's role in responding to his parents' ill-informed advice and working through challenges with breastfeeding.

Advocates

Indonesia's patriarchal society positions women to rely on their husbands to advocate for breastfeeding on their behalf, particularly with family elders and health care providers. Despite Indonesia's federal law mandating breastfeeding for infants in the first six months, many health care facilities do not provide care that follows global standard protocols for establishing a breastfeeding relationship immediately after birth. In particular, babies are often kept separate from mothers in a nursery while the mothers

recover from birth. This practice is contradictory to guidelines set by WHO and UNICEF for the Baby-friendly Hospital Initiative, a comprehensive approach to promote breastfeeding that states it is best to have mothers and their infants remain together in the same room (WHO, 2019). Nisa, a lactation consultant in Jakarta, acknowledged that many hospitals have improved their practices to be more supportive of breastfeeding, but there is still room for improvement. Nisa claimed that most hospitals in Indonesia falsely advertise that they follow baby-friendly policies. From her experience, health care providers "come up with lots of reasons why you should not" breastfeed immediately after giving birth, even though this early initiation is widely accepted by experts as a prominent factor in establishing a successful breastfeeding relationship (Khan et al., 2015).

Farah (Java) described the argument she had with nurses while she was in the hospital recovering from her son's birth last year. She went on to explain that the nurse was following a "weird hospital policy that says my baby should be put in [the nursery] for 24 hours after the [cesarean] surgery. That's something very unexpected." Farah expressed her bewilderment at the philosophy to risk successful breastfeeding for the sake of protecting a newborn from germs.

> I asked, "Why don't you give him here, because it's the best thing you can do for me and my baby to initiate breastfeeding?" [The nurse] added, "There's so many germs in the hallway." She also said that newborns will be able to stay healthy without breastfeeding for three days. Yes, but I want him now so I can initiate breastfeeding as soon as possible... I asked my husband to argue with the nurse about that. That's when [my baby] was given to me.

Nina (Java) had a similar experience while in the hospital for her first birth before she became a lactation consultant. "My husband was quite stubborn... He was the one who kept asking the nurse, 'Can you put my baby inside the room? Because my wife wants to learn to breastfeed'." One father, Dan (Java), explained that he advocated for his wife to breastfeed against his parents' advice to use formula after his young family moved in

with them. “Luckily, I helped [my wife get her mind off it] and [she] let me handle my parents. [I said] their generation and ours are different now, and we read a lot of articles from the internet and Instagram.” Maria (Java) said that her husband advocated similarly when he told his parents not to suggest formula while he was out of town for work. She recalled, “Maybe because [my mother-in-law] thought I was too skinny, so I didn’t have any milk, so she suggested I give him formula.” When Winda’s mother (Java) suggested formula, her husband offered his support, “If your mom is giving you more concerns again, you just let me know what I have to say to back you up.” Several participants and key informants described Indonesia as a patriarchal society – one in which the man is expected to make final decisions for his family. As the primary decision-maker, many men assume the responsibility to advocate for his family’s best interests, even if that means intervening with his wife’s parents.

In some families, a father must be his wife’s advocate, because the grandmother directly addresses him (instead of his wife) about feeding decisions, especially if the grandmother is his biological mother. Karina (Java) described the conflict between her husband and mother-in-law when she began suggesting formula:

> My mother-in-law... thinks that... breastfeeding only happens for the first six months... After that, formula. If I don’t give my baby formula, my baby will lack nutrition... She said, “Son, give your baby formula so your baby will gain weight. Your wife’s breastmilk apparently isn’t good enough.” And my husband said, “Mom, the thing is, I want my baby to be fed with breastmilk only. If you think that [Karina’s] breastmilk isn’t good, give her anything she needs to produce the breastmilk, but my baby should only be fed with breastmilk, not formula”... So every time my mother-in-law asked him to buy formula, he said, “Yes, later”... He just said it, and never bought it.

This appeasement – saying yes with no intention of following through – may have been a tactic to allow his mother the ability to save face as the matriarch without defying his wife’s trust. Karina’s mother-in-law disagreed and believed so strongly that her grandchild should receive formula that she eventually stopped talking to Karina

altogether. As a response, Karina said, “When my baby was 15 months old, I finally gave up, [and gave] my baby formula.”

Rudi (Bali) also described the role he believed men should take as advocates, protectors, and gatekeepers of outside advice while supporting their breastfeeding wives. “You have to be the castle, the wall, the middle man to communicate while she is... breastfeeding.” His wife, Gabriella, described how difficult her first few days postpartum were. She had engorgement (i.e., overfull breasts) that was “painful at the time” and she recalled feeling “depressed” because of a “lack of sleep, and so many people coming” to welcome the new baby. Rudi admitted there was “a lot of pressure” from all sides to breastfeed, and he felt like it was better for people to share their advice directly with him, and then he would share with his wife what he felt was helpful. “I felt sorry for her, because she kept getting input from a lot of sources, from my mom, her mom, from her family, from other aunties and uncles.” At one point, Gabriella asked for his help by talking directly to his overzealous mother about the breastfeeding advice she was offering. Rudi admitted that he felt like the advice his mother offered was not trustworthy. “Sometimes [with] my mother, sometimes I didn’t have the courage to ask her where she got her information. I would just say, ‘Okay, mom. I’ll pass it on to her’. That’s what I said to make her happy.” Rudi indicated that he didn’t share all of his mother’s advice with his wife. Again we see a father appeasing his own mother in the interest of supporting his wife’s breastfeeding success.

Despite the strong pro-breastfeeding social norms across Java, Bali, and Flores Islands, there were a few instances of support for formula feeding among grandmothers where new mothers relied on their husbands to resolve the conflict. Jayachandra (Java) expressed her breastmilk and stored it in the freezer for her parents-in-law to use after she returned to work. She recalled that her husband’s parents tried to convince her that formula was better than breastmilk. “They would say, ‘It’s too much hassle. You’re off to

work, so why don't you use formula now? If you use this brand, your baby's IQ will increase'." Consistent with the majority of other women in this study, Jayachandra enlisted her husband to discuss the issue with his parents on her behalf. "I asked him to talk to his parents [and tell them] I wanted to breastfeed as long as I could produce it. Why should I use formula when I had my own factory?"

Winda also relied on her husband to buffer advice to use formula. "He always backed me up when another family member [advised], 'Your baby has to know how formula tastes, so when you decide to give formula soon, she will like it'... [My husband] always answers to back me up."

Breastfeeding Assistants

It was common for fathers to be less involved with the details of infant feeding decision-making. Farah (Java) was one of the few women who expressed gratitude for her husband's engagement in decisions about their baby compared to the typical role an Indonesian man takes as a parent. "In Indonesia, it's not very common for husbands to be involved in maternal decisions, to interfere," she said.

Many families in Indonesia rely on their religious beliefs for guidance on parenting. Nina, a lactation consultant in Jakarta, described Islamic teachings as a prominent influence in many women's decisions to breastfeed, as well the primary driver for a father's breastfeeding support.[10] "It's stated in the Qur'an [that a mother must breastfeed] and... husband also wants to support their wife because they know it's a good thing and [it's] according to the religion," Nina (Java) said. Ahmad, Putri's husband, explained his motivation for supporting his wife's breastfeeding goals,

[10] The Quran, Islam's holy book, and Sunnah (i.e., teachings of the Prophet Muhammad) assert that breastfeeding is the Allah (God)-given right of the child. The teachings of the Quran encourage mothers to breastfeed for two years and define specific responsibilities of an infant's father including providing the nursing mother (a) moral support and encouragement, and (b) food and clothing (Yashmin, 2015).

“As a Muslim, [I] knew that there was some intangible [blessing] that God gives [through] the milk, which is why I tried my best...” Like Ahmad, many participants – mothers and fathers – discussed their Muslim religion as the reason they made the decision to breastfeed. Belinda (Java), a college-educated mother in her mid-20s, went so far as to say her Muslim religion was the primary motivator to breastfeed her son, and the immunity benefits were secondary. This was also true for Adit (Java), who said that the most important aspect of breastfeeding was that it is “provided by God.” Adit’s wife, Jasmine, agreed and said that bonding and economic benefits of breastfeeding were secondary to its spiritual value.

Consistent with Islamic teachings, fathers often took on the assistant role by providing indirect instrumental support, often with the intent to make their wives’ job to breastfeed easier. Some fathers offered their support by purchasing necessities. For example, Siska’s husband (Java) bought a large refrigerator so she could store her pumped breastmilk, and Adelia’s husband (Java) bought “any [galactagogue[11]] supplement he could think of” so her breastmilk supply would be sufficient. Similarly, Angela’s husband (Flores) made Jali – a regionally popular high-protein meal made from local nuts believed to be an effective galactagogue. Henry (Java), father of one, explained, “I helped [my wife with] pumping... like moving milk from the cup to the bottle and preparing, washing the bottle, and preparing the pump, to wash it, maintenance stuff.” Yuliana (Flores) also described the help her husband and mother provided. “After giving birth, I couldn’t do chores yet, so they helped washing, cooking, taking care of the baby,” she said. Timoty (Java) bathed the baby. Kevin (Bali) took responsibility for all the

[11] Any pharmaceutical or herbal compound ingested to increase lactation is considered a galactagogue. The Academy of Breastfeeding Medicine currently cites insufficient evidence to recommend their use. However, public demand for galactagogues is strong (Bazzano et al., 2016).

household chores. He told his wife, “You do the baby, I do the rest... cleaning and washing and everything. [You do] only the things I cannot do.”

> Karina explained how she and her husband divided their responsibilities: My only task at night is breastfeeding, and after I’m done breastfeeding, I give our baby to my husband for cuddling and carrying before sleep. On weekends, it’s his job to shower our baby and give me me-time. Simple things like [bringing home] food that I want to eat after work because a breastfeeding mother... always feels hungry...Simple things as long as the oxytocin is flowing, simple things that make me happy.

On rare occasions, a mother described her husband’s instrumental support as integral to her breastfeeding success. Nisa (Java) told about the distress she experienced as a result of pain while breastfeeding and her newborn’s admittance to the hospital for dehydration one week after birth that led to her realization of the importance of a husband’s support. She went on to explain how her husband was able to help her through the emotional time:

> My husband pumped [my breast] for me, because I was crying all day long. I couldn’t even hold the breast pump, so it’s all my husband’s work, so I think that the husband, it’s very important for him to keep having faith.

Citra’s husband described a conversation with his wife as they negotiated responsibilities for feeding their son in the first few days and his role to feed him expressed breastmilk with a medicine dropper. “You just take a rest on the bed, let me do the work,” he told her. Citra (Java) also recalled an “unforgettable moment” when her husband milked her “like a cow” to relieve her engorgement in the first week postpartum. The above examples show the incredible power of a father’s support to help a mother breastfeed through simple actions.

Mothers’ Caretakers

While not as commonly discussed as instrumental support, several women talked about the ways their husbands provided moral support and took extra steps to make sure their wives were comfortable. For some participants, emotional support during stressful times was more important than instrumental support. As Angela’s husband

recognized, even though he helped with the cooking, he admitted there was more he could have done to be emotionally supportive of his wife while she was breastfeeding each of their four children.

Thirty-year-old mother-of-one Jasmine (Java) recalled that her husband, Adit, woke up with her every time she breastfed throughout the first few nights. Jasmine told him, “Just go back to sleep... You need to go to work tomorrow. And he said, ‘No, I will not allow you to do this struggle by yourself’.” Simply accompanying their spouses for middle-of-the-night breastfeeding sessions, even if not helping their wives in any specific way, shows support and solidarity in the struggle with sleepless nights. “Maybe for him it’s not important, but for women, it’s important,” Jasmine reflected on the support her husband provided her. Timoty (Java) shared that his wife “always woke me up when the baby was breastfeeding [overnight]… that was what was fair.” Another mother, Winda (Java), remembered, “I was very tired, and I was breastfeeding, and I asked him to massage my back.” Winda admitted she had to coax him “a little bit,” but “he was always able to massage my back when I was tired.” Despite his resistance, Winda expressed her gratitude for her husband’s support. “I feel like, ‘Oh my God, Alhamdulillah [praise be to Allah]. I got a husband who is very considerate of me’.”

Icha also described how she asked for emotional support, “I don’t need anything more than a hug... Just don’t ask every time I am suddenly crying. You just need to hug me, okay?” Icha reflected on their conversation and said her husband was supportive as long as it made her feel “happy and helped.”

Mothers’ Gratitude. The majority of women were enthusiastically grateful for any amount of support their husbands provided, particularly during joint interviews. Many husbands admitted they could have paid closer attention to their wives’ needs while they were breastfeeding or helped more with the chores. For example, on Flores, Yuliana stated that there was nothing her husband, seated beside her during the joint interview,

could have done to be more supportive, but Will was more critical of himself, “I wasn’t that responsive to [her needs].” Women who interviewed without their husband present were less expressive about their gratitude for their husbands’ support. Rudi and Gabriella (Bali) were the only couple interviewed together who agreed that Rudi’s breastfeeding support could have been better.

Gabriella described herself as a “typical Balinese woman” who believes she can “do it all” herself. “I didn’t want to involve him, because he had a job... I thought I could do it by myself, [but] at some point, [I realized] okay, I cannot do it by myself.” Aside from working, Gabriella’s husband did not provide the support she needed in the beginning. Rudi said, “I admit that I was actually not supportive in the first couple months, because I was working.” He explained how hard it was for Gabriella, who is a physician and used to working daily, to stay home alone with the baby for the first six weeks postpartum, which was customary in Indonesia for healing from birth and bonding with the baby.

“At that time, I’m not asking for help, and he’s not offering help, so we were not communicating.” Both parents described that time as difficult. Rudi went on to say, “After that, it was a great experience, because we learned from it for the next baby.”

New Mothers as Fathers’ Educators

There was a trend in which new mothers took on the educator role to enlist those around them – particularly their husbands – to be effective at providing support during the postpartum stage. The following examples demonstrate how fathers may be resistant to learning about breastfeeding, which in turn positions mothers as gatekeepers and facilitators of breastfeeding knowledge. As the sole person with breastfeeding knowledge, a new mother becomes responsible for educating her husband to provide the kinds of support she wants and needs to breastfeed successfully. Women discussed their husbands’ varying degrees of resistance ranging from refusal to attend a breastfeeding class to deferring reading articles until they had more time. Karina (Java)

explained the limitations of her husband's support. When asked if there was anything more her husband could have done to support her, she said,

> He actually fully supports me, but he's the kind [of man who says], "You can have whatever you want. I will support you, but don't ask me to attend classes, as I am [busy] with my work tasks." [But] that's the only thing I wanted my husband to do.

Karina went on to share that her husband knows very little about breastfeeding. "I sent him some links to articles providing information, but he never opened them. So I am the one who needs to explain it to him." In the same interview, Dea, a lactation consultant and mother of three, responded to Karina by saying, "So it's like my husband... I asked him to join [the class] too and he said, 'No, you do the learning, not me'." Dea's tone of voice and demeanor indicated her frustration with her husband's expectation that she bear the responsibility to learn about breastfeeding.

Dea and Karina agreed that their husbands' resistance to learning about breastfeeding "causes a friction," as Karina put it. The invisible burden for women to prepare their husbands to be able to provide support is pervasive in some women's lives. Jasmine (Java) described her relationship with her husband, Adit, "He's like the boss. He doesn't like to read the articles, so I read and talk to him about it." She went on to explain that Adit will provide support if the information she provides makes sense to him. The already-large burden of preparing for birth and learning about infant care and breastfeeding and becoming a mother is compounded by the responsibility to educate fathers to garner their support during a time when she may be at her greatest vulnerability.

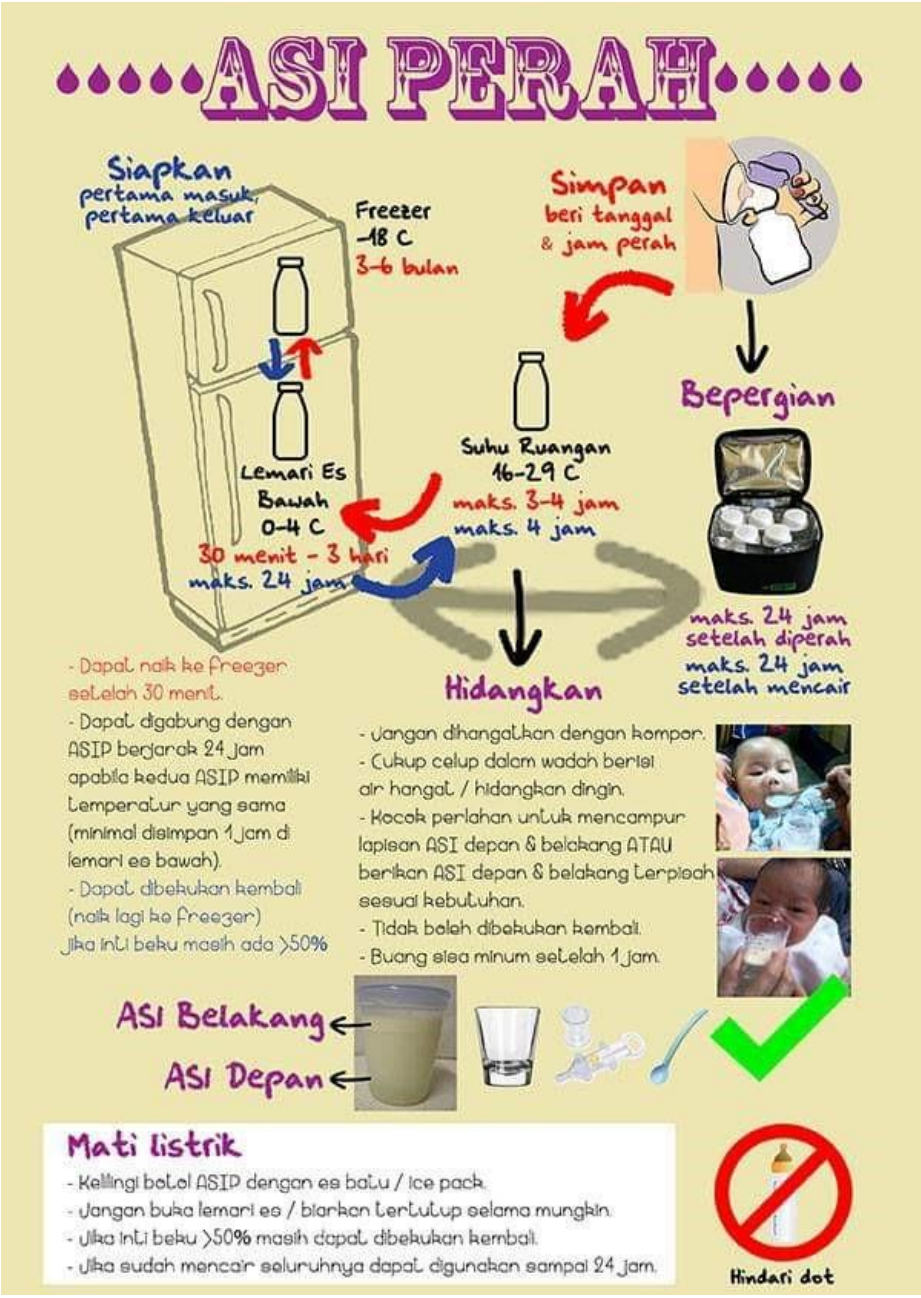
While the focus here is on fathers, mothers also discussed educating extended family members and domestic workers – anyone who cared for their baby – to ensure everyone was contributing to their breastfeeding success. Citra (Java) is an extreme

example. She prepared an infographic about handling expressed breastmilk for her family (See Figure 2):

> I knew I needed to get back to work. I needed to make sure everyone knew how to prepare expressed breastmilk when I was away... so straight after the [breastfeeding] class, I made that infographic. I was... pretty anxious.

Figure 2

Handling Expressed Breastmilk (Homemade Infographic)



Note. Prepared by Citra, a mother on Java Island, for her family to reference.

Citra went on to explain that she felt especially compelled to educate her parents about all aspects of breastfeeding because she and her husband and infant were living with them at the time. Citra recognized her husband's limitations as a support person, particularly when he worked out of town, and was determined to learn as much as she could. She told her husband, "I want to go to this class, even alone, without you. I need to sit in this class." Nina also recognized her husband's limitations in spite of his role as her advocate in the hospital, previously quoted (p. 38). Nina said, "He doesn't know how to help, because he also doesn't know anything."

Winda (Java) also considered her husband to be supportive by agreeing to read the information she shared with him and supporting her decisions. She recalled he once told her, "I'll go with your decision." She most often shared resources with him while he was away working on a different island for several weeks at a time.

> My husband is the type of guy [who will follow my lead]... He's very supportive... I usually send him a message, like, "Dad, I found this new article about breastfeeding. Would you like to read?" [And he would reply], "Ok, when I am not busy."

Belinda also expected that her husband be educated on breastfeeding alongside her. Her husband, Timoty, agreed and recalled a list of actions he took to support his breastfeeding wife, and he said, "She always makes me read the books that she's reading." Based on American English conventions, a reader may interpret Timoty's statement as resistant to his wife's encouragement to read about breastfeeding. However, he used the phrase "makes me" often when discussing the support his wife requested. Timoty's vocal tone, physical demeanor, and jovial interactions with his wife indicated that he was, in fact, happy to provide the support she requested. "I wanted to help," Timoty said as he remembered challenges his wife faced while breastfeeding.

The Necessity of a Father's Breastfeeding Knowledge. One husband recognized the imperative for both parents to be knowledgeable. Jonah (Java) said, "I

think we husbands also need to learn more about breastfeeding, not just the mother. We need to learn about parenting in general." By recognizing the value in learning about breastfeeding and other parenting issues, fathers may become more effective and valuable sources of support. Jonah's wife, Lindang, went on,

> The mother knows the theory, but once she faces [problems or pressure to use formula], she starts to feel uncertain, confused, and starts to question if she wants to hold on to her values... That's where support plays an important role, to help the mother decide on [important] things.

Lactation consultants and breastfeeding educators have also recognized the value of a husband's involvement. Icha (Java) described her peer support organization's approach for breastfeeding education to enable a father to make supportive decisions for his wife and infant's breastfeeding relationship:

> Because we have the patriarchal system here in Indonesia mostly, so men would be listened to more than women, usually men decide what's the best for the family. So if the husband already [has] some information, correct information about breastfeeding...

Nisa, another lactation consultant in Jakarta (Java), interjected:

> Then he can decide rightly. We usually ask the mother to have at least her husband at home when we visit her, so we can make sure the information doesn't only go to her... so we can make sure that she has at least one person who is ready to support her and it usually is the best [if it] is her husband.

Chapter Five: Discussion

The decision to breastfeed is a dynamic process for women – and the decision is revisited often after a baby is born as new challenges arise. Findings from the current study address whom mothers in Indonesia choose as their breastfeeding support persons, why, the types of support they requested and received, and their evaluations of that breastfeeding support. The prevalence of grandmothers and fathers as support providers for women in this study is consistent with decades of breastfeeding research worldwide that emphasizes the critical role of support on breastfeeding success (Guyer et al., 2012; Hannon et al., 2000; Hoddinott & Pill, 1999; Mukuria et al., 2016; Raisler, 2011; Scott & Mostyn, 2003; Scott, 2018; Whelan & Lupton, 1998). Notably, an infant's father and grandmothers are undoubtedly influential on a mother's attitudes about and practices breastfeeding (MacDonald et al., 2020; Scott et al., 2004; Scott et al., 2018; Swanson & Power, 2005). MacGregor and Hughes (2010) found in their review of nine qualitative studies focused on breastfeeding experiences of mothers in disadvantaged groups that an infant's maternal grandmother and father were the most influential on a woman's breastfeeding decision. More broadly, Guyer et al. found in their interpretive phenomenological analysis that all mothers they interviewed relied heavily on others for practical and/or emotional support. Yet, in brief, the current findings demonstrate that the father and, to a greater degree, grandmothers, often become sources of stress and frustration for mothers. Importantly, the findings add to the relatively minimal scholarship highlighting the dissatisfaction women experience with breastfeeding support (e.g., Graffy & Taylor, 2005; Tengku et al., 2016) that begins to contradict the longstanding assumption that breastfeeding support, in any form, is related to successful breastfeeding in Southeast Asia (e.g., Februhartanty et al., 2006; Tan, 2011).

From the outset, this research was designed to explore the idiosyncratic and constitutive nature of communication about breastfeeding experiences and decision-

making in Indonesia. The interviews and focus groups held across Java, Bali and Flores Islands provided insight to the individualized and culturally bound dilemmas that mothers face when making decisions about breastfeeding. The following discussion briefly summarizes the roles of grandmothers and fathers in Indonesia as breastfeeding support providers before discussing theoretical and practical implications of the research. Here, I apply Problematic Integration (PI) Theory (Babrow, 2001) as a framework for understanding the unintended negative consequences of ineffective breastfeeding support on breastfeeding decision-making. I argue that breastfeeding challenges are fundamentally PI dilemmas that are co-created, exacerbated, transformed, and managed through communication between mothers and support providers. Through specific examples of mothers' recounts of their breastfeeding experiences and interactions with their support providers, I demonstrate the role of PI in breastfeeding decision-making. Throughout this discussion, I also emphasize the cultural implications on Indonesian mothers' responses to PI dilemmas like uncertainty, unwanted and ineffective breastfeeding support on infant feeding decision-making.

Breastfeeding Support Providers

Grandmothers

Interviews revealed that grandmothers' support helped mothers to manage breastfeeding challenges by providing (a) instrumental support, (b) informational support, (c) emotional support such as encouragement, and (d) validation. Mothers also reported a variety of ways in which grandmothers often interfered with how they coped with breastfeeding challenges by responding to requests for support in unexpected or unwelcome ways, or by simply providing unsolicited/unwanted support. Mothers in the current study had an overwhelmingly negative opinion of a grandmother's breastfeeding support. Despite their availability, vested interests in the health of their grandchildren, and firsthand experiences with infant feeding, grandmothers were said to be sources of

ineffective breastfeeding advice (e.g., no breastfeeding position is better than any other), myths (e.g., a crying baby must be hungry), and criticism (e.g., berating a mother for attending a breastfeeding class) that led to an array of relational conflicts and breastfeeding challenges. However, mothers were not unanimous in evaluating any single form of breastfeeding support. Instead, a mother's individual expectations and desires for infant feeding seemed to determine how she evaluated the support she received. The reality is that a support recipient's interpretation of support may not match the support provider's intent. While some women in this study positively evaluated ineffective and inaccurate breastfeeding support, the majority of support discussed in this study was viewed negatively for a variety of reasons. These reasons often reflected conflicting desires between a mother and her support person, such as a mother's desire to breastfeed exclusively and a grandmother's desire to quiet their grandchild's cry.

Mothers commonly discussed intergenerational cohabitation and social mores for interacting with elders (particularly in-laws) as defining elements for interactions between a new mother and her infant's grandmother providing breastfeeding support. The influence of cohabitation with grandmothers on a woman's success at EBF is still unclear, in part because it is an under-researched aspect of the breastfeeding context (Negin et al., 2016). In the current study, a new mother who lived apart from her infant's grandmother seemed to have more freedom to choose her source of breastfeeding support; yet the majority of mothers in this study, regardless of cohabitation status, identified their infants' grandmother as a support person. The influence of grandmothers as conduits of traditional values and practices in families and general society has been recognized for decades, starting with renowned cultural anthropologist Margaret Mead as one of the first to recognize the phenomenon (Aubel & Sihalathavong, 2001; see Aubel, 2005 for an extensive literature review on the role of grandmothers in at least 68 non-Western cultural settings). A grandmother's role may be especially influential in so-

called “traditional” societies like Indonesia where collective, group values preempt individual thinking and behavior (Kayongo-Male & Onyango, 1984).

Mothers discussed balancing their responses to unwanted support with maintaining the quality of their relationships with their infants’ grandmothers. Some women felt comfortable directly addressing the conflict with their own mothers, and a few women stopped breastfeeding in front of their mothers altogether to avoid criticism. When interacting with mothers-in-law, women in this study tended to be more careful to remain polite when confronted with a conflict. For example, Novi (Java) admitted to going along with her mother-in-law’s advice to avoid certain foods while breastfeeding when they were face-to-face, but she did not actually follow the advice. Often, mothers who struggled with a lack of (effective) support from their infants’ paternal grandmothers relied more on their husbands for support.

Fathers

For the last half century, the role of fathers as caretakers has evolved globally in concert with changing socioeconomic demands, and public expectations and perceptions of parenthood (Coleman et al., 2004). According to mothers in this study, fathers played an important role as a breastfeeding support provider as well as their children’s caretaker. This trend in the current findings is consistent with recent research in Indonesia indicating that fathers are among the most preferred sources of breastfeeding support, thus highlighting their potential to help their wives avoid formula supplementation or breastfeeding cessation altogether (Februhartanty et al., 2006).

Mothers discussed relying on their husbands to confront health care providers and paternal grandmothers who undermined their success at EBF. As the patriarch, a father was expected to guide his own mother to provide the type(s) of breastfeeding support his wife desired and valued. In this study, men supported their wives instrumentally (e.g., housework, aiding in milking breasts), financially, and emotionally.

According to women and men in this study, a father often followed his wife's lead and assisted her in whatever capacity he was able, willing, or requested, even if it meant providing indirect breastfeeding support by doing household chores to reduce his wife's responsibilities. Tengku et al. (2016) pointed out that instrumental support from a father may be perceived by a mother as a form of emotional support as well. This understanding of instrumental support to be emotional in nature may play an important role in a mother's success breastfeeding. Nonetheless, a mother's evaluation of the breastfeeding support she received is powerful in determining its effectiveness. Jasmine (Java) said it best when she explained that the support her husband provided her might not be important to him, but it was important to her.

Every mother expressed gratitude for her husband's support (albeit some more than others). However, several participants (both mothers and fathers) discussed how a father's support could have improved. Most prominently, women disliked their husbands' lackadaisical approaches to learning about breastfeeding, but this was never discussed in joint interviews with a married couple. Many women, particularly in the company of their peers, discussed their frustrations with their husbands for relying on them to be the educator about breastfeeding, their own support needs, and their babies' needs. In sum, despite the potential for grandmothers and fathers to provide profoundly impactful breastfeeding support for mothers in Indonesia, this research revealed how support persons may be a source of conflict for women.

Breastfeeding Challenges as Problematic Integration

As Problematic Integration (PI) Theory describes, decisions are made in the context of one's expectations and desires, and PI arises from a misalignment between those expectations and desires. The current findings reaffirm Babrow's (1992) claim that the role of communication becomes more prominent as integration between expectations and desires becomes more problematic. As women were asked to discuss

their challenges with breastfeeding, they highlighted conversations and interactions they had with their support persons more than any instance. PI theory describes communication that arises when (1) our expectations and desires diverge, (2) we are uncertain about something valuable, (3) we experience ambivalence, and (4) we hold impossible desires. PI theory provides a useful lens for making sense of the patterns of communication between mothers and their support persons about breastfeeding, because it provides a framework to describe a mother's decision-making process as she copes with breastfeeding challenges and seeks support.

The current findings suggest that women in Indonesia have internalized the imperative to breastfeed, but struggle with the confidence and self-efficacy to overcome breastfeeding challenges and ineffective support. This is similar to Koerber et al.'s (2012) observation that American women have internalized the "should" of breastfeeding, but stressed the need for women to internalize the "can." The experience of breastfeeding is in large part an experience of PI, wherein probabilities and evaluations destabilize one another (Babrow, 1992, 1995). For example, both the perceived probability of challenges and value of breastfeeding shift repeatedly as the experience of breastfeeding plays itself out over the course of days, weeks, months or even years. The initial sensation of pain during the baby's suckle can make breastfeeding seem more difficult than expected, which might stimulate fear or determination by altering her probabilistic orientation toward her ability to successfully breastfeed without pain. This destabilization may compel a mother to adjust her values to focus on the overall health of the baby rather than on her desire to breastfeed and turn to formula to avoid pain, or perhaps she reaffirms her commitment to breastfeed and begins her search for a remedy for her pain in order to restore integration between her desire and expectation to breastfeed without pain. A decrease in a three-month-old's growth rate may lead a breastfeeding mother to question her ability to sustain adequate

milk production, or produce nutritionally beneficial breastmilk, which might diminish her confidence in successful EBF – in PI terms, negatively affect her probabilistic orientation – and lead her to supplement with formula or try galactagogues to resolve her PI dilemma. The instability of orientations presents hurdles for a new mother to remain optimistic and determined to continue EBF, and to make decisions consistent with her (and worldwide health agencies') breastfeeding goals.

Another way to understand breastfeeding challenges as PI is to consider it in terms of the relationship between expectations about breastfeeding and evaluations of one's performance as a mother. In their grounded theory analysis of 33 Australian mothers' accounts of their breastfeeding experiences, Hauck and Irurita (2003) found that all mothers – those who were successful at EBF and those who supplemented with formula – identified "incompatible expectations" in breastfeeding information and advice. The authors argued that this incompatibility was a source of dilemmas for mothers, leading them to experience self-doubt, guilt and confusion. Hauck and Irurita identified several aspects of breastfeeding that commonly brought about incompatible expectations between a mother and individuals whose opinions she valued (e.g., infant's father, family, friends) including the benefits of breastfeeding, acceptable breastfeeding duration, and how to manage breastfeeding in public. The expectations of others are especially important to consider because they often provide the baseline for a mother's evaluation of her own breastfeeding (and mothering) performance (Hauck & Irurita, 2003).

Previous research like the work by Hauck and Irurita (2003) has begun to describe the phenomenon that breastfeeding women experience, but lacks theoretical framework to contextualize the implications. Breastfeeding PI by any other name would feel just as challenging, as Shakespeare might have said. Koerber et al. (2012) argued that these incompatible expectations identified by Hauck and Irurita (2003) can be

understood in terms of PI in that mothers' probabilistic and evaluative orientations diverged from the start, which has implications for how women respond to breastfeeding challenges and make decisions. The "reality shock" – the discrepancy between expectations and lived experiences (Guyer et al., 2012) – that women often face while breastfeeding can be understood as a form of PI, most likely evoking divergence or uncertainty. Another qualitative analysis of first-time mothers' breastfeeding stories by Brouwer et al. (2012) reported that women were indeed "shocked" by their challenges initiating breastfeeding upon release from the hospital, as they realized that their expectations were not realistic. This reality shock that women often experience is exemplary of PI, such as divergence or uncertainty that may be experienced throughout the breastfeeding process. Even if a breastfeeding woman does not experience reality shock, any breastfeeding challenge would likely cause some form of PI in light of how highly breastfeeding is generally valued among parents worldwide (Hauck & Iriruta, 2003; Koerber et al., 2012), and how breastfeeding decisions so often reflect a mother's identity (Afiyanti & Solberg, 2015; Knaak, 2009; Mozingo et al., 2000; Nuzrina et al., 2016). Furthermore, the severity of potential consequences of not breastfeeding (financial and health) may also bring about dilemmas regarding breastfeeding decisions. The form of breastfeeding PI a woman experiences has implications on whether she seeks different types of support, from whom, and how she evaluates the support she receives. The current research describes how Indonesian women experience their breastfeeding PI and support, and the various social and cultural aspects that are relatively unique to Indonesian culture such as the influential role of religion.

Islamic Influences on PI

Religion is an obvious source of commitment to breastfeeding for Muslim men and women. A recent prospective study with 2,640 Iranian mothers found that Muslim religion was significantly positively associated with EBF duration (Maharlouei et al.,

2018). Islamic teachings that explicitly provide guidance for breastfeeding (EBF for first six months and continued breastfeeding until child is at least two years old) may contribute to strong values toward breastfeeding and parenthood, which may exacerbate PI as it is experienced. In other words, successful breastfeeding may mean more to a Muslim mother and father than simply achieving optimal nutrition for one's child, practicing healthy parenting behaviors, or maternal-infant bonding. While participants did not identify their religious affiliation as part of this study, women's clothing choices (to wear a hijab, also known as a veil, to cover their heads), practice of Salat (Muslim prayer ritual performed five times daily that includes feet and hand washing and kneeling in the direction of Mecca), and fasting during Ramadhan (during phase one of data collection) made their Islamic beliefs apparent. Indonesia is home to the largest Islamic population in the world, with 80% of Indonesians identifying as Muslim (Thompson, 2017; Webster, 2013), and more than half of the mothers interviewed in this study (women on Java Island) gave some indication of their Muslim religion.[12] An overwhelming majority of those women who practiced Islam cited their religion as the reason for deciding to breastfeed.

While all religions arguably espouse values that are reflected in parenting decisions, the Quran explicitly outlines parenting roles as they are related to infant feeding. Islamic values may encourage such a strong commitment to breastfeeding, thus taking a role in how mothers cope with their breastfeeding PI. If a mother relates her decision to supplement with formula to depriving her child of God's "blessing," as one

[12] Every participant on Java Island gave some indication of their Muslim religion, most commonly through their clothing choices. On Bali, there was a mix of individuals who identified as Muslim or Hindu. There are small groups of Muslims in the coastal towns on Flores Island, but the majority of residents are Catholic as a result of the Portuguese colonial influence. Nearly all 24 mothers and support persons interviewed on Flores Island had Catholic religious imagery in their homes, where the interviews were conducted, which was a reliable indicator of their affiliation.

father described the value of breastmilk, she may experience heavy emotional consequences to her decision about infant feeding. In a similar vein, the Quran asserts that an infant has a God-given right to breastmilk (Yashmin, 2015), and may give rise to serious emotional turmoil for a mother faced with advice to use formula. To avoid breastfeeding PI of this magnitude, mothers may ignore or overlook problems in the breastfeeding process, thus choosing to not seek out information or solutions to their problems unless medical attention is necessary. Other mothers may engage in immediate and thorough information-seeking to resolve their PI in a desperate attempt to fulfill their breastfeeding desires, achieve their parenting ideals, and meet their religious expectations.

Social Support Influences on PI

Conventionally, scholarship treats social support as a means through which to cope with PI (e.g., Ford et al., 1996; Koerber et al., 2012; Repass & Matusitz, 2010). Yet, the current data uncovers the implications of well-intentioned, misguided, uninformed, uninvited, unwanted, and generally ineffective breastfeeding support on breastfeeding PI and decision-making. This study's findings demonstrate that support persons may actually be the source of breastfeeding PI, especially divergence between expectations and desires as support persons offer an undesired solution to a problem, and uncertainty as a mother's probabilistic orientation is destabilized when her support person poses questions and instills doubt in her ability to successfully EBF. In one instance, Putri (Java) experienced divergence as a result of her mother's input. Putri's mother encouraged her to keep breastfeeding despite her pain and criticized her decision to attend a breastfeeding class with her husband, saying that it was unnecessary. The ineffective advice and lack of emotional support from Putri's mother was disappointing for Putri. Putri hoped to learn information that would help minimize her pain in the

breastfeeding class, and her mother's input added to the stress of the divergence she was coping with as she desired to breastfeed without pain but experienced the opposite.

The influence of values on PI and social support. The values women prioritize in their parenting and their ideals for motherhood characterize the PI they experienced regarding breastfeeding and determine their reactions to the breastfeeding support they receive. And a support person's personal parenting and breastfeeding values determine the breastfeeding support they often provide to mothers. A grandmother who valued a mother's comfort and infant's satisfaction more than the benefits of EBF often provided breastfeeding support by offering to supplement with formula to either relieve the mother from pressure, stress, or pain, or to ensure the infant was receiving enough nutrition. An infant's grandmother's beliefs about the necessity of formula supplementation often complicated a mother's ability to form and maintain probabilistic and evaluative orientations toward successful EBF. While well-intentioned, a grandmother's suggestion to supplement with formula is, more often than not, the source of PI for mothers by bringing about divergence between her desire to EBF and the expectation to need to supplement with formula, or highlighting the uncertainties that are inherent to breastfeeding to an extent that damages a mother's confidence in her ability to breastfeed exclusively. The following examples illustrate the influence of values on how women respond to breastfeeding support in the form of supplementing with formula.

Linda (Flores) felt obligated to return to work shortly after giving birth, so she expressed her gratitude for her family's "support" to feed her infant with formula. However, she also expressed her guilt for not breastfeeding exclusively. Even though she valued EBF, she also valued her family's financial stability, and this incongruence of values – the impossibility to satisfy both obligations simultaneously – caused a mixture of evaluations she has for her family's support and her own efforts as a mother. She knew she must rely on her family to supplement in order to continue working, but she

also believed that this was not the absolute best decision for her baby's health. Despite her dilemma, Linda continued working. Even though she was thankful for the support from her family, her desire (and value) to breastfeed exclusively was strong enough to bring about negative emotions.

On the other hand, women like Citra (Java) and Sulli (Bali), who held EBF as their highest priority, were certain of their ability to breastfeed successfully and did not feel the obligation to return to work while breastfeeding. Because these women deeply valued their ability (and obligation) to breastfeed exclusively, any suggestion that they might not be successful in achieving their goal brought about dilemmas that resulted in their negative evaluation and dismissal of their infants' grandmothers' support. Both women spoke of their frustration with their infants' grandmothers' suggestions to supplement with formula "just in case" EBF did not work out. Citra insisted that she could breastfeed exclusively, but she did admit to feeling anxious about the possibility that her mother-in-law's lack of confidence in her ability to breastfeed may have been justified. In Sulli's case, her mother-in-law offered to prepare formula "every time" her son cried. Sulli understood her mother-in-law's support to be an acknowledgement of the possibility of her failure. These interactions created uncertainty for Sulli and Citra in their own successes as breastfeeding mothers. In both cases, in response to the troubling input from their infants' grandmothers, the mothers sought out support and guidance from experts and peers, re-asserting their original values, and successfully met their EBF goals.[13] Sulli and Citra's experiences are exemplars of how a woman's high level of commitment to EBF is likely to enable her self determination to overcome any obstacle

[13] The economic privilege of both successful women created a meaningfully different scenario than Putri's. Sulli and Citra had the financial resources to not return to work, and to seek out alternatives to their infants' grandmothers' support, which reflects previous findings that Indonesian women with higher socioeconomic status who do not work are more successful with EBF (Yohmi et al., 2016).

she encounters, as previous research has suggested (Avery et al., 2009). While it may be enough to have a strong commitment to breastfeeding for some, other women's dilemmas (like Putri's) are exacerbated by their limited resources that constrain the choices that are available.

In another example, Gabriella discussed the pressure she felt from her father to supplement with formula in the first few days postpartum, which was in opposition to her desire to assess her milk supply after three days and determine the need for supplementation at that time. Gabriella's expertise as a medical doctor gave her confidence to accept the uncertainty about her milk supply for the first three days postpartum, but her father's input added to the stress of her adjustment as a new mother. After her initial resistance to supplementing, she succumbed to the pressure of her family. Gabriella's decision-making demonstrates the value she places on her relationship with her father. Instead of defending her commitment to EBF, she chose to go along with her father's preference, keeping peace in the family, and (presumably) dutifully deferring to his authority as the patriarch. In her interview, Gabriella cried as she expressed her guilt for not breastfeeding exclusively, and her dilemma highlights the value she places on EBF as part of motherhood. This example is consistent with a recent finding from interviews and focus groups with mothers, grandmothers, fathers and community health workers in Malawi that elders who provide financial and childcare support for new mothers are particularly influential with their traditional beliefs (Scott et al., 2018). Aside from the patriarchal society, a hint of coercion based on the (unspoken) threat to withdraw other forms of support may be at play in Gabriella's situation.

These women's experiences demonstrate the relational nature of PI, whereas the breastfeeding support these grandmothers (and grandfather) clearly believed they were providing turned out to be the source of conflict for the mothers. By offering to supplement with formula, the support persons might have been trying to relieve the

mothers from pressure to breastfeed exclusively. Instead, their efforts created dilemmas between the mothers' values for breastfeeding and their probabilistic orientation toward successful EBF.

The values associated with breastfeeding and its inherent uncertainties are so profound for many women that striving for control is not enough to cope with the PI. This is perhaps because they recognize the impossibility of complete control over their success at EBF. As a result, they may convince themselves that future breastfeeding experiences will be different, thus adjusting their probabilistic orientation. For example, a woman who experienced pain while breastfeeding her first child may believe that the likelihood of pain while breastfeeding her second child is minimal. While some individuals cope with PI by altering their values, this is not an option for all mothers – breastfeeding her child may be just too important to her, or alternatives to breastfeeding may not be feasible (e.g., lack of access to clean drinking water). Instead, women who opt to supplement with formula, especially as they return to work, are forced to live with the reality of the conflict between their desire for EBF and obligation to work. More specifically, for mothers in Indonesia, the risks of supplementing or not breastfeeding at all may represent more than simply a conflict with one's values. Breastfeeding in Indonesia is a public health priority that addresses dire risks for children.[14] This lack of clean water is a crisis that mostly affects low- and middle-income countries like Indonesia, creating opportunities for breastfeeding dilemmas that are relatively unique relative to the majority of high-income countries.

[14] Indonesia's infant mortality rate is 21 per 1,000 (The UN Inter-agency Group for Child Mortality Estimation, 2019) and the under-five mortality rate is 25 per 1,000 (UNICEF, 2020). Diarrheal diseases, often transmitted through contaminated water, are the third leading cause of death for children under five in Indonesia (Ritchie & Roser, 2019), and EBF is the most economically efficient way to avoid the risks associated with contaminated water.

The Experience of Uncertainty

Breastfeeding is a healthy process that is laden with uncertainty – a mother may never know how much breastmilk she produces, how much her infant consumes, how much her infant needs, the nutritional makeup of her breastmilk and her infant's nutritional needs, and all the reasons why her infant cries. Even though some questions are unanswerable, many mothers relied on their support persons and sought information to understand and resolve breastfeeding challenges and learn ways to prevent future problems. Breastfeeding mothers inevitably encounter uncertainty and often grapple with the ways in which they embody their parenting values through their infant feeding decisions (Guyer et al., 2012). This study's findings demonstrate the ability for cultural norms and myths to supersede expert information to influence breastfeeding support and mothers' decision-making about breastfeeding, and the potential for breastfeeding support from grandmothers to bring about uncertainty.

In the breastfeeding context, certainty is quite elusive. The uncertainty experienced by a support person may exacerbate a mother's own experience with uncertainty by posing questions she may not have thought about independently or adding emphasis to an uncertainty she was already grappling with. In the current study, women were rarely allowed to live with uncertainty related to breastfeeding without someone evaluating their experiences negatively. We can see this phenomenon portrayed in the context of a crying baby explained above. A grandmother's intervention to feed a crying baby with formula disrupts the breastfeeding demand-supply cycle, and often is the catalyst for PI by heightening a mother's uncertainty about why her child is crying and suggesting a solution that contradicts with the mother's desires to breastfeed. While no one may be able to prove the cause of an early infant's cry, a mother is not provided a chance to learn her child's idiosyncracies before being pressured to use formula. As a result of a support person's suggestions, mothers may experience

uncertainty about their infant feeding decisions that transforms into divergence or impossibility as formula becomes more realistic as a supplement or replacement for breastfeeding.

Previous research recognizes that many factors for breastfeeding cessation (e.g., insufficient milk supply) have strong psychological components in addition to biological aspects (Blyth et al., 2004; Chatman et al., 2004; Meedya et al., 2010). These psychological components may be comprised of fear and worry for an infant's well-being. In their study testing predictors of EBF in Jamaica, Chatman et al. referred to "built-in anxiety" that may lead to a lack of self-efficacy for EBF, but may also inhibit a woman's physiological milk-ejection reflex, causing true inadequate milk production. The postpartum period – a time of physical healing and transformation, extreme hormonal fluctuation, and emotional fragility – potentially confounds a new mother's receptivity to alternatives to EBF and ability to cope with uncertainty. This susceptibility might be true if a woman has a particularly unpleasant experience with uncertainty about the adequacy of her milk production or whether her infant is satiated (Ahluwalia et al., 2005). We saw this was the case for Gabriella on Bali Island who, despite her medical background, struggled to combat her father's misconceived belief that his grandchild needed formula supplementation. Because Gabriella could not prove that her days-old newborn did not need formula, she succumbed to her father's pressure to supplement even though she knew it was not necessary. The psychological stress that Gabriella appeared to experience as her uncertainty and divergence grew more problematic was borne out of her communication with her father, reflecting Meedya et al.'s claim that breastfeeding cessation is far more complicated than simply a pro-con analysis. Because many variables of breastfeeding are not controllable, support persons are not always able to help mothers reduce their uncertainty in ways that enable EBF success.

A crying infant was a common example where we can see grandmothers' support as the catalyst for uncertainty. Many mothers discussed their infants' grandmothers' insistence that their babies cried because of hunger and insufficient breastmilk. Lactation consultants and a midwife on Java Island also discussed the common misconception among the older generations that a crying baby must be hungry. In these cases, as the cause of the infant's cry was called into question, the mother's uncertainty about her child's well-being and nutrition was heightened. Given an infant's limited ability to communicate, a mother's options for troubleshooting her child's cries are constrained to trial-and-error, and she may feel pressure to take the advice to supplement with formula. A few women like Nina and Tasya (Java) held their ground and refused supplementation. Tasya's resistance went so far as to move from her parents' home back to her own house to end the "stressful" and unwanted support.

In PI Theory terms, women who resisted attempts at supplementation may have been more comfortable with their uncertainty surrounding breastfeeding than women who gave in to offers to supplement. It is also possible that mothers who denied offers to supplement with formula were extremely committed to their values related to EBF or were not bothered by their uncertainty (if any) about their breastfeeding success at any point, particularly in response to unwanted advice advocating formula. Breastfeeding PI is experienced uniquely among mothers based on their relationships, cultural communication patterns, parenting values, previous experiences, and available resources. And the sources of breastfeeding PI are also largely unique to the individual; however, two common sources of breastfeeding PI for Indonesian mothers emerged from the data and are discussed below.

Common Sources of Breastfeeding Pl

A Grandmother's Criticism

Consistent with previous findings (Dennis et al., 2002; Guyer et al., 2012), validation appears to be especially important to mothers in this study, particularly when they experienced difficulties with breastfeeding. Several participants recalled their infants' grandmothers criticizing them – for the way they held their baby to breastfeed, the way they chose to seek breastfeeding help, the rate at which their baby grew, and the way they supplemented with formula. In every case, a grandmother's criticism seemed to stem from her worries about the health and growth of her grandchild. Most often, a grandmother criticized a mother's inability to produce enough breastmilk to satisfy her grandchild and encouraged supplementing with formula. Calling these aspects of breastfeeding into question undoubtedly plays a factor in a woman's self-efficacy to breastfeed, and Susiloretni et al. (2013) found that women with low self-efficacy in rural Indonesia have twice the risk of breastfeeding cessation compared to women with high confidence.

There was one notable exception, where a grandmother's criticism reflected a staunch pro-breastfeeding stance. After Novi reluctantly supplemented with formula to improve her infant's growth rate, her mother-in-law disagreed with the solution and went so far as to describe Novi to friends and family as her only daughter who "doesn't breastfeed." Novi expressed her desire to breastfeed exclusively, but faced challenges with her baby's growth rate, causing uncertainty in her own breastmilk production. Considering that Novi eventually quit breastfeeding, her uncertainty may have intensified and transformed into impossibility to satisfy her desire to breastfeed a healthy baby. Novi's mother-in-law's emphasis on her own value of breastfeeding may have exacerbated Novi's experience with impossibility and the guilt she felt for not breastfeeding.

In a systematic review measuring the effect of a grandmother's involvement on their infant grandchild's breastfeeding duration, grandmothers with negative opinions about breastfeeding were found to decrease the likelihood of breastfeeding by up to 70% (Negin et al., 2016). Everyone would benefit from a grandmother's awareness of her influence on a vulnerable new mother. A grandmother may ensure that a mother feels that her physical and emotional needs matter as much as her infant's needs by simply treating her with respect and offering encouragement. A mother's disillusionment with her infant's grandmother's support lays fertile ground for breastfeeding PI to fester as their relationship evolves and she continues to grow her family. Breastfeeding PI of any form resulting from interactions between a mother and her infant's grandmother can be complicated to manage, because mothers in Indonesia are not empowered to engage in disagreements with elders about age-old breastfeeding misconceptions. Recent findings from a mixed-methods study conducted with mothers and breastfeeding support persons in Southeast African country Malawi are consistent in showing the detrimental effect paternal grandmothers can have on a mother's success with breastfeeding (Scott et al., 2018). Even though Scott et al.'s analysis did not address the barriers for mothers to engage in conflict with paternal grandmothers, their work acknowledges that grandmothers tend to persist in their traditional beliefs about breastfeeding, which seems to be the source of grandmothers' criticism.

A Father's Advocacy is a Common Solution to a Grandmother's Criticism. While grandmothers may be a source of PI as they attempt to provide breastfeeding support and often criticize mothers, we see that fathers most often aid mothers in resolving their breastfeeding PI when they act as their advocates. A father's role as an advocate seems to be defined by a conflict between a mother's desire for EBF and someone else's desire (e.g., a grandmother concerned about her grandchild's growth rate or a nurse concerned about germs outside of the hospital nursery). Fathers were

expected to advocate for their wives' EBF desires, especially when his own mother was involved. Patterns of communication and social conventions in a patriarchal society like Indonesia often place fathers in the decision-making role, even in the case of breastfeeding. Participants in this study indicated that a grandmother often spoke directly to her son about her assessment of her grandchild's growth or behavior as it is related to breastfeeding, which puts a father in the optimal position to advocate for his wife's desires. In these cases, fathers may act as a buffer for mothers as they focus their effort on establishing a breastfeeding relationship with their newborn. In other cases, women may request their husbands speak with whoever – most commonly his mother – is suggesting supplementation with formula. The results highlight a variety of these instances as told by Karina, Gabriella and her husband Rudi, Jayachandra, and Winda.

Outside the home, a father's role as his wife's advocate has also been cited as necessary and effective. For example, Farah (Java) explained the conflict she had with her postpartum nurse who was resistant to bring her newborn infant into her recovery room for breastfeeding. Here, Farah was experiencing divergence – a desire to breastfeed her son and a growing expectation that her nurse was not going to cooperate. Instead of continuing the confrontation, Farah expected that her husband's request would be taken more seriously and asked him to address her desire with the nurse, which was successful in resolving her PI. This kind of scenario – reflective of hospital protocols that do not support EBF – was alarmingly common, according to participants on Java Island.

A Father's Reluctance toward Breastfeeding Education

Mothers in this study indicated that fathers often lacked enthusiasm for learning about breastfeeding, which left mothers with the responsibility of educating their husbands. This responsibility was the second of the two most common sources of breastfeeding PI for women in this study. In addition to negotiating the new demands of

motherhood and breastfeeding, women take on the burden of educating their husbands on how to provide the support she needs at the time she needs it the most. As previously discussed, breastfeeding challenges may create PI, and a woman's responsibility to educate her husband may confound her ability to cope with the breastfeeding PI. This may occur when a mother becomes distracted from her immediate (and sometimes urgent) need to resolve a breastfeeding problem by equipping her husband with the knowledge he needs in order to be any help to her.

Several husbands in this study were not interested in attending breastfeeding classes with their wives, and women in this study admitted that it caused "friction." The friction was a result of unmet expectations, wherein the woman desired for her husband to prepare himself as a support provider and father, and he did not perceive the same value in educating himself as she did. Women proactively sought information about breastfeeding as a way to prepare and avoid dilemmas once their babies were born. However, their husbands were uncooperative with their wives' plans, creating an impossibility that fathers would educate themselves to be effective support persons. Nina (Java) explained that her husband could not help her with breastfeeding problems, because he "doesn't know anything." However, Nina was motivated to find help and had the resources to travel and pay for the proper professional support, so the divergence or impossibility that she experienced in response to her husband's inability to support her in ways that she needed was resolved relatively easily. As Nina coped with her PI, she shifted her value on her husband's support away from his breastfeeding knowledge to appreciate what he contributed that enabled her to find the support she needed.

This phenomenon of men's resistance to breastfeeding education is reflected in recent findings in the Australian state Tasmania. Through their interviews with 26 fathers, Hansen et al. (2018) found that they severely lacked education about the benefits of and logistics of breastfeeding. Aside from their location in the Western

hemisphere and patriarchal influences, Australia and Indonesia have very little in common culturally. According to the Global Gender Gap Report (World Economic Forum, 2017), the influence of patriarchy is much stronger in Indonesia than Australia.[15] This ranking is based on a number of key economic (participation and opportunity, and educational attainment, and health and survival) and policy (political empowerment) indicators. In Indonesia, the patriarchal gender-based division of labor positions men as economic providers and the women as homemakers and caretakers, which may contribute to men's lack of enthusiasm about breastfeeding education (Levtov et al., 2015). However, given the similarity in men's lack of breastfeeding knowledge in Indonesia and Tasmania, patriarchy may not sufficiently explain this phenomenon.

In many cases, women in the present study seemed to temper their expectations for the support their child's father could provide. Being more realistic with their expectations reduced the dilemma of the divergence between their desire for their husband's help and reality that husbands often did not know how to help. It was also common for women to seek out different (more knowledgeable) sources of breastfeeding support to compensate for their husband's lack of knowledge. While we do not know the specific reasons for each woman's reliance on her support persons, we do know that almost every woman in this study identified more than one breastfeeding support person. This dependency on multiple support persons may be a consequence of the different attitudes men and women have about a father's parenting activities, wherein men tend to view activities like burping the baby (especially as a newborn in the first three months) negatively (Sary & Turnip, 2015). Considering how grateful women in the current study were for the support their husbands provided, we can infer that mothers

[15] Australia is ranked 35th and Indonesia is 84th out of 144 countries included in the Global Gender Gap Report (World Economic Forum, 2017). For the analysis of patriarchal influence, countries are scored and ranked based on gender disparity in a wide range of social, economic and political aspects.

were able to cope with their divergence and adjust their perceptions to focus on the positive aspects of their husbands' support without overburdening themselves with educating them about breastfeeding support.

Implications

Theoretical Contributions

Breastfeeding is a fundamentally communicative process. From the information needed to develop the knowledge and skills necessary for successful EBF to the social support that influences women's decisions, breastfeeding decisions hinge upon a woman's communication with those surrounding her during some of her most vulnerable moments as a mother. Consistent with Matthias and Babrow (2007), who applied PI theory to dilemmas experienced in pregnancy, this research recognizes breastfeeding as a healthy biological process that rarely occurs without some level of challenge for a new mother. In the current research, mothers from all demographic categories including residential setting, household income, education, and cohabitation status, discussed their challenges with breastfeeding and unmet expectations for social support. The current findings have implications for advancing understanding of the role of communication in decision-making for EBF within the communication, medical, nursing, and public health disciplines. In the communication discipline, breastfeeding, as a topic area, is widely overlooked, and the majority of social support research is situated in the context of a particular illness (e.g., Brashers et al., 2004; Ford et al., 1996; Repass & Matusitz, 2010); moreover, acknowledgement of the centrality of communication is often absent in public health scholarship on breastfeeding (Bai, Wunderlich & Fly, 2011; Behera & Kumar, 2015; Fam, 2012; Kronborg & Væth, 2004). From a communication perspective, Koerber et al. (2012) applied PI theory specifically to breastfeeding failures, but the present research explores women's accounts of breastfeeding experiences across the spectrum of successes (and failures), which provides a more holistic

understanding of women's experiences. Although nursing publications tend to feature the most comprehensive, interdisciplinary approaches to breastfeeding research, many studies still overlook the role of communication, and an inductive, social constructionist analysis of women's decision-making process about EBF is rare (for an exemplar, see Hoddinott & Pill, 1999).

This research also follows Van Esterik's (2012) recommendation to examine breastfeeding activities as a strategy to privilege the nuance of cultural beliefs and values in the process of developing effective breastfeeding promotion programming and policies. In this sense, breastfeeding is understood to be a cultural artifact that is uniquely embedded in women's lives as they negotiate their family structures and social demands (Van Esterik, 2012). Instead of focusing on barriers and facilitators to breastfeeding or its benefits, describing in rich detail – using thick description – the experiences of breastfeeding women is an ideal strategy to develop community empowerment and address health disparities (Geertz, 1973; Ponterotto, 2006; Van Esterik, 2012). The richness of mothers' stories in the current study describing their experiences with their infants' grandmothers (and grandfather, in one instance) and fathers as support persons brings further insight into how breastfeeding PI is co-created as well as how women engaged in communication to manage PI. Together, the variety of stories, reactions and dilemmas weave a tapestry of the nuanced and delicate balance between probabilistic and evaluative orientations about breastfeeding.

While Scott et al. (2018) recognize the limits for their mixed method data to explain the difference between a maternal grandmother's and paternal grandmother's influence on breastfeeding practices, the takeaway was that paternal grandmothers have a negative influence on a woman's breastfeeding success, which is consistent with current findings. Scott et al. asserted that the source of a paternal grandmother's negative influence stems from a conflict between her traditional views and expert

information, but the current findings allude that the source of her influence runs deeper. By describing the communication patterns between a woman and her mother-in-law, I uncovered the dilemmas she experienced as a result of their interactions as well as certain social mores that prohibit her from denying her mother-in-law's advice.

Furthermore, the current research answers the call from Februhartanty et al. (2006) for more research on the role of Indonesian fathers in helping their wives with breastfeeding challenges. Here, findings on fathers' reluctance toward breastfeeding education adds depth to understanding Sary and Turnip's (2015) observation that Indonesian fathers rely most on their wives for information about breastfeeding and other areas of child rearing. In addition to adding to the body of knowledge on what makes for good teamwork in parenting (Februhartanty et al., 2006), the data presented here expands insight to include multiple perspectives (fathers' first-person accounts, grandmothers, and lactation consultants) on a father's role in supporting his infant's mother in coping with breastfeeding challenges. This is a meaningful addition to breastfeeding scholarship, the majority of which features accounts from only mothers (Sary & Turnip, 2015).

The broader context of breastfeeding support. The current findings reveal a different perspective on the influence of breastfeeding support on a woman's breastfeeding decisions than what has been found in previous research. A recent Cochrane meta-analysis of 73 randomized and quasi-randomized controlled trials including 74,656 mother-infant dyads from 29 countries concluded that any form of lay (trained community health workers and volunteers) or professional (midwives, nurses, and physicians) breastfeeding support had a positive effect on a woman's breastfeeding success (McFadden et al., 2017). The overwhelmingly positive assessment of breastfeeding social support may be a result of how social support was operationalized. For McFadden et al.'s analysis, eligibility criteria defined breastfeeding support as the

act of professionals or volunteers “giving reassurance, praise, information, and the opportunity for women to discuss problems and ask questions” during the postpartum period (p. 2). Types of breastfeeding support were distinguished in several categories based on whether it was provided a) proactively versus indirectly (i.e., in response to a woman requesting support), b) in a one-on-one versus group setting, c) by a professional or lay supporter, or d) face-to-face versus by phone. Of note, the current research addresses several aspects of social support that are not included in this meta-analysis featuring a large portion of contemporary examinations on the topic. The definition of breastfeeding support featured in McFadden et al.’s (2017) meta-analysis limits the scope of research to facilitators and barriers of breastfeeding. Furthermore, McFadden et al.’s meta-analysis is limited in several ways: (1) it overlooks distinct differences among emotional, instrumental, and informational forms of support, (2) it does not consider the support recipient’s evaluation of the support, and (3) it disregards the longstanding relationships that undergird breastfeeding support from friends and family. By broadening the definition of social support to include actions and words intended to be supportive that are negatively evaluated by the recipient, scholars may identify a new barrier to breastfeeding as well as other health behaviors outside of illness contexts. In doing so, they may uncover various inadvertent negative outcomes of social support that were not previously considered in breastfeeding research and in the larger landscape of health communication scholarship. Communication that has been long recognized as intended to be supportive may not actually be helpful in every situation (see Albrecht & Adelman, 1987, for review). The effectiveness of social support relies on a) the extent to which a supporter is “aware of and sensitive to” a recipient’s needs as well as, b) the recipient’s perception of their relationship with the supporter (Sarason et al., 1994, p. 94). For example, as Graffy and Taylor (2005) found that mothers in the United Kingdom often viewed the encouragement and troubleshooting from their

physicians and problem-solving suggestions from their husbands as ineffective, mainly because they preferred emotional support over the instrumental support.

The hallmark of the current research is its emphasis on women's perspectives on their breastfeeding experiences, and its consideration of the profoundly detrimental influence social support may have on a woman's breastfeeding success if she considers this support unwanted or ineffective. Another novel dimension to this research design is its inclusion of first-person accounts of breastfeeding support in a variety of roles (fathers, grandmothers, lactation consultants, and a midwife), which is still limited in research addressing breastfeeding (Sary & Turnip, 2015) and social support (Revenson et al., 1991). This aspect of the research answers the call from Falceto et. al. (2004) to consider the broader context of a marital couple to understand ways breastfeeding support may be improved. As the findings suggest, a mother's preferences and needs play a defining role in the kind of breastfeeding support she asks for, values, receives, and evaluates positively. Her preferences also determine how she evaluates the breastfeeding support she receives. The relational dimension of breastfeeding support is incredibly powerful in determining the effectiveness of social support.

Practical Applications

At its core, the focus of the current research on social support in the breastfeeding context provides a basis for advising people on how to be more supportive. However, the success of social support is complicated. Simply saying (or doing) the *right thing* is not universally applied to every relationship, context or stressor. McFadden et al.'s (2017) suggestion that breastfeeding support may be improved if it is "predictable, scheduled, and includes ongoing visits with trained health professionals" is ideal, but overlooks individual needs and the demands and constraints of contemporary health systems and resources worldwide. One of the few studies acknowledging the pitfalls of ineffective social support recognized that well-meaning individuals may

exacerbate a recipient's negative feelings by being over-bearing with their support such that the recipient feels "overprotected" or like an invalid (Boutin-Foster, 2005). Women need individualized, real-time, on-demand breastfeeding support that is responsive to the knowledge and cultural place they occupy.

Similar to Babrow and Kline's (2000) work, one basic practical implication of this research is that individuals in a position to support breastfeeding mothers must understand the nature of uncertainty experienced by mothers to best offer support to encourage continued breastfeeding. As noted by Hines et al. (2001), interventions are unlikely to succeed without more completely understanding communication patterns through qualitative research in addition to the social, systemic, dyadic, and psychological aspects related to a woman's decision to breastfeed. Rather than perpetuating the assumption that decisions about breastfeeding are made rationally, current findings point to the importance of understanding a woman's individual experience with breastfeeding challenges and support, and consider her unique family structures and stressors as factors for decision-making (Hoddinott & Pill, 1999). The following section discusses an approach to breastfeeding promotion that is grounded in the cultural aspects of Indonesian mothers' everyday lives.

Rhetorical Inoculation. Future breastfeeding promotion efforts may do well to create a sense of predictability through rhetorical inoculation regarding specific aspects of breastfeeding that bring about uncertainty. This principle strategy for breastfeeding promotion – also termed "anticipatory guidance" by Hauck and Irurita (2003) – would activate breastfeeding educators to preemptively discuss common physical (e.g., pain) and relational (e.g., unwanted advice) problems that may arise throughout breastfeeding with expectant mothers. The rhetorical inoculation occurs as culturally relevant, credible information and advice is presented to a mother before the moment she experiences a challenge that creates uncertainty so that she may avoid pitfalls created by

misinformation and myths about breastfeeding from lay support persons. More specifically, breastfeeding promotion efforts should counter common myths before grandmothers have the opportunity to suggest formula supplementation. In PI terms, the principle of rhetorical inoculation equips a mother to maintain stability between her probabilistic and evaluative orientations toward EBF and avoid dilemmas including uncertainty or divergence that may be caused by the grandmother's advice or criticism. It may also create a mindset that permits an individual to live in harmony with uncertainties surrounding breastfeeding, and an ability to discern which uncertainties may demand information seeking and intervention, and which do not. The largest benefits to this approach would be providing a mother with the information she needs so that her decision-making aligns with her breastfeeding goals, minimizes her vulnerability to ineffective advice, and maintains confidence that she is able to meet the needs of her baby (Mardiyah et al., 2019). However, this proactive approach risks introducing uncertainty and doubt in a mother's confidence to breastfeed exclusively, particularly for first-time expectant mothers. In response to this risk, rhetorical inoculation must occur as mothers are provided relevant, credible, useful, and easily accessible information about possible solutions to common problems *before* they occur.

Educating Fathers and Grandmothers. With this research, I also contend that breastfeeding promotion should be more family-centric in its education programming, wherein the target audience is broadened to include fathers, grandmothers, and other individuals expecting to provide support to a breastfeeding mother. In addition to the current findings, Wolfberg et al. (2004) and Lavender et al. (2005) confirmed the longstanding belief that a mother's attitudes about breastfeeding, her husband's, and her mother's attitudes are all associated with breastfeeding success. From this, we may infer that a father's resistance to breastfeeding education may be detrimental. Based on the findings from their randomized controlled trial with 59 expectant fathers in the United

States testing the effect of attending a breastfeeding promotion class on a mother's intention to breastfeed, Wolfberg et al. emphasized the value in educating fathers on the benefits of breastfeeding. In this setting, mothers whose partners attended the breastfeeding class were significantly more likely to initiate breastfeeding (Wolfberg et al., 2004).

It was common for a mother in the present research to describe her infant's grandmother's support as ineffective and stressful, and educating grandmothers on how to provide effective breastfeeding-friendly support may dramatically improve a mother's success with EBF. Despite participants' negative impressions of grandmothers' breastfeeding support, the fact remains that grandmothers play a significant role in decision-making about breastfeeding. The magnitude of a grandmother's role in the family is consistent across the Global South; Swedish cross-cultural communication expert Andreas Fuglesang referred to grandmothers in countries in Asia, Africa and Latin America as a "learning institution in the community" (Aubel, 2008, p. 7). As "guardians of tradition" (Aubel et al., 2004), grandmothers are often assumed to be stuck in their ways, leaving them a largely untapped cultural resource for breastfeeding promotion (Aubel, 2008). However, Aubel et al. found that grandmothers in Senegal can (and will) update their knowledge and approaches for breastfeeding support if they are included in nutrition education. Grassley and Eschiti (2007) also revealed grandmothers' willingness to update their breastfeeding knowledge through their focus group research in Texas. As an example, a recent maternal and child nutrition project in Sierra Leone echoed the need to learn more about how the roles of family members influence breastfeeding practices so that they may be included in future health promotion efforts (MacDonald et al., 2020). Another successful intervention in Kenya that used dialogue groups to activate grandmothers and fathers in promoting breastfeeding and providing appropriate social support to mothers was developed using a similar approach during the formative

phase (Mukuria et al. 2016). The projects in these three countries all have one thing in common: the Grandmother-Inclusive Approach (Aubel, 2012).

Coined by social scientist (and founder of the American NGO The Grandmother Project) Judi Aubel, the Grandmother-Inclusive Approach and methodology for health communication and behavior interventions relies on anthropological and feminist approaches and lays the groundwork for health development programming to expand its focus by engaging grandmothers as change agents (Aubel, 2008). The approach includes a five-step process: 1) assessing grandmothers' roles and influence through discussions highlighting a variety of perspectives, 2) publicly recognizing grandmothers' roles in promoting maternal and child health, 3) engaging grandmothers through participatory communication/education activities to explore the possibilities for combining traditional beliefs and modern medical advancements, 4) bolstering the capacity of grandmothers to promote culturally relevant and effective maternal and child health practices, and 5) monitoring, evaluation and documentation for future improvements and applications (Aubel, 2008). This Grandmother-Inclusive Approach can potentially be implemented in other countries, further advancing WHO's mission to increase the number of babies who are breastfed.

Breastfeeding promotion and support skill-building should be featured in a standalone intervention instead of being embedded in other programs featuring related content (e.g., education, overall health, agriculture), as Pelto et al. (2015) found in their analysis of behavior change communication programs to improve infant and young child feeding in low- and middle-income countries. Furthermore, the central finding from a systematic review of 48 studies examining barriers to EBF in low- and middle-income countries (including two conducted in Indonesia) is that breastfeeding support programs must be improved at the household and community levels (Kavle et al., 2017). In Indonesia, parenting magazines and websites have begun to offer men a range of

modern ways (i.e., alternatives to ancient customs not supported by the medical community) to support their wives during pregnancy and breastfeeding, but the approach lacks cultural relevance (e.g., advice follows practices found in the West, and pictures are of White people) (Levtov et al., 2015). As a worldwide initiative, breastfeeding rates will not likely increase to meet WHO's Sustainable Development Goals without a better understanding of the cultural and social aspects of women's decision-making about infant feeding.

Limitations

Participants

This study was limited in its lack of transferability to various subpopulations and health care sectors involved in breastfeeding promotion. Despite the considerable sample size, and religious and regional diversity among participants, this sample was overwhelmingly well-educated and socioeconomically privileged. Though unintentional, this study may perpetuate a popular, often incorrect, assumption that people with high socioeconomic status may be more motivated to breastfeed than poorer, less educated women. Simply by consenting to participate in this research, an individual expresses an interest in talking about infant feeding and their personal experiences, which inherently suggests potential bias.

The study did not include health care providers, such as obstetricians and nurses, who work with new mothers. Considering the criticism from participants about medical professionals' lack of knowledge about and support of breastfeeding, obtaining the insights of these professionals would help add to our understanding of how mothers experience breastfeeding and associated support. The current sample also lacks depth in perspective from grandmothers. Nearly every mother I interviewed discussed her infant's grandmother's role in breastfeeding support, but only three grandmothers

participated in this research. It would be valuable to obtain more insight to the grandmother's perspectives and experiences providing breastfeeding support.

Sampling Practicality and Logistics. The limitations to the research are the result of a number of practical and logistical issues in recruitment that influenced the sample. As an international researcher conducting a study in a foreign country with a limited timeframe for data collection, I relied on two organizations to aid in participant recruitment before I arrived in the country. First, I partnered with the Indonesian Breastfeeding Mothers' Association (AIMI) as an agency for recruitment, which strongly influenced the characteristics of the sample population. The majority of participants interviewed during phase one of data collection were recruited by members of AIMI and were exceptionally motivated, supported, and successful at breastfeeding. Even though the research was described to participants as an exploration of experiences with feeding babies, AIMI's involvement in recruitment inherently showcased women who valued breastfeeding, because the majority of mothers in their network had previously contacted them seeking help with breastfeeding. The self-selection bias may represent a meaningful difference between mothers who are interested in discussing their infant feeding experiences and those who are not (Costigan & Cox, 2001).

Second, Plan International's involvement in recruitment may also be considered as a limitation. All participants recruited by Plan International were also recipients of Plan's programming and resources. Because of this pre-existing relationship between the organization and potential participants, these individuals may have felt a sense of obligation to contribute to Plan International's goals, thus agreeing to participate more out of a feeling of obligation – or indebtedness – than personal interest. While Plan International's staff reassured me that no participant on Flores Island was coerced, there is no way to verify that Plan International's economic development programming did not influence individual's willingness to participate. It is also a possibility that many

participants recruited by Plan International agreed to participate in order to gain the novel experience of interacting with an American researcher, as some Plan volunteers suggested.

Lastly, the first round of data collection included women who had children since 2009; however, in doing these interviews I learned that nine years is too long of a time lapse for a mother to remember the details and nuance of conversations, decisions, and emotional reactions she had about feeding her infant. This realization led to refining my inclusion criteria for round two to include only women who had given birth in the previous year in order to obtain richer data with more detail about mothers' experiences, communication, and decision-making.

Data Collection

Joint Interviews. As mother-grandmother and mother-father duos, participants of joint interviews had meaningful relationships with one another outside of the interview. These relationships allow participants to work together to tell the whole story from both perspectives and fill gaps in each other's memories (Morris, 2001). However, there are several limitations related to this aspect of the research design. First, participants may not say everything they are feeling, because they do not want to jeopardize their relationship with their interview partner. It is also possible that there was pressure to be unified in the story told, so participants may not have shared divergent interpretations of their collective experience because they believed they should tell the same story as their interview partner (Wilson et al., 2016). Reasons for attempting a unified story may reflect the nature of the relationship between participants as well as the level of patriarchy in society, and one's perceived taboo of formula feeding. Parent-child and marital relationships are complex and intimate and may influence a multitude of explanations for one's behaviors and interpretations of others' behaviors. Second, their discussions of an emotionally charged time in their lives and relationships might have brought up conflict

that was previously forgotten or created new conflicts (Wilson et al., 2016). Lastly, there were instances when one interview partner talked substantially more than the other, and this mostly occurred when one person was more comfortable speaking English than the other. It is possible that one participant did not give their partner equal opportunity to share their stories. Several participants translated for their partners, and they may have taken liberty to omit or add details or interpretation, or chosen not to pose parts or all of a question to their partner and simply answered on their behalf. Also, no grandmother was interviewed alone. As a result, the joint interviews may have inhibited a grandmother's responses in the interest of her relationship with the mother of her grandchild.

Study Setting. The public and private locations of interviews often presented distractions. Participants commonly arrived for their scheduled interview in the midst of other errands or as part of their work commute, and many were accompanied by family members. Many women soothed babies and breastfed during interviews. In some cases, non-participating spouses, friends, or other family members observed the interview, which may have influenced the stories told in ways similar to joint interviews.

During interviews that occurred in mothers' homes, it was common for grandmothers or other family members to entertain, feed, and soothe small children in the same room. In one instance, a woman's father interrupted the interview several times asking her to end the interview and join the rest of the family for their daily prayer. While she disregarded her father's requests, it is possible she felt pressure to end the interview quickly and abbreviated her answers. In another woman's home, both of her parents sat in a corner of the room and quietly observed the interview.

Public locations also presented an array of unexpected distractions. Interviews that were conducted in restaurants were particularly at risk of outside noise and distractions presented by other customers. During one interview in a secluded waiting

room in a midwifery clinic in Jakarta, a parade interrupted the audio recording with loud instruments and a cheering crowd. Aside from stopping the interview and audio recording, we all relocated outside to watch the parade, which caused a disruption.

Wolowea Village. The selection criteria for Plan International's recruitment included new mothers with low socioeconomic status exclusively on Flores Island, most of whom were in Wolowea Village, an insular farming community with relatively primitive infrastructure. Previous researchers have found that women of lower socioeconomic status rarely spoke about their experiences with breastfeeding (Dennis, 2002; Hoddinott & Pill, 1999), which may explain the lack of depth and variation among interviews from this community.

In Wolowea, several interviews with mothers were conducted in the company of Plan International staff and two midwives. During my first one-on-one interview with a mother in Wolowea, a total of seven individuals accompanied SH and me to the participant's home and observed as I began the interview with SH's help to translate. After realizing that my escorts were not leaving, I requested they step outside the home (i.e., a single-room bamboo home with no electricity) to respect the participant's confidentiality. As the interview progressed, two other Plan International staff members peeked into the room and interrupted to greet the participant, which was distracting. In these situations, participants may have felt social desirability pressure to answer questions in a certain way in front of others since formula feeding is stigmatized.

There were also times when I relied on the midwives for translation from the local dialect, and that may have also affected the social desirability dimension of participants' answers. In fact, there was one instance when the midwives interjected into a conversation I was having with a participant before her interview about the can of infant formula I noticed on her kitchen table. The midwives' reactions were surprised, but also could have been interpreted as judgmental.

Language Barriers. Thirty-seven interviews and focus groups were translated, and of them, 10 underwent two layers of translation on Flores Island. Paid transcriptionists were directed to transcribe audio files verbatim, but that proved difficult to achieve. Many of the transcriptions of my words did not follow conventional American English grammar, which indicated that there was a disjunction between languages. To ensure the highest value of the translated transcriptions, I requested that all responses by the participants be transcribed (whether in English or Indonesian), and that any discrepancies in spoken translation be noted with an explanation. Usually the spoken translations were general summaries of the participants' detailed stories. On occasion, opportunities for further probing were missed as a result of this lack of word-for-word translations during interviews.

Cultural Competence. In addition to noting differences in translations, transcriptionists also provided cultural and historical context to some participants' stories. For instance, one mother described a tense relationship with her mother-in-law and alluded to her bias against her ethnic group, but the reference was quite understated, and I did not recognize it to follow up on during the interview. Because the transcriptionist contextualized the participant's story, I was able to confirm with the participant during follow-up communication and consider it in my analysis. Cross-cultural research presents unlimited challenges for meaning to be overlooked or lost.

Strengths

Rigor

As a component of rigor, validity is understood to be defined by how well the research represents the phenomenon (Morse, 2015). Validity of the present findings was ensured through rich description developed from observations and interviews with 120 total participants (84 mothers and 36 support persons) who had first-hand experience with breastfeeding as a mother or support person, and sometimes in both roles. The

themes identified here brought about the essence of the breastfeeding experience for Indonesian women, and I was able to confirm this through the repetition across interview transcripts. The common experience of breastfeeding challenges, especially frustrations with support persons, demonstrates the internal consistency of the data presented here.

The progression of data collection from convenience sampling to theoretical sampling allowed me to verify tentative observations in the data and advance my understanding of the phenomena (Morse, 2015). For this research, I engaged multiple theoretical sampling techniques including adjusting participant selection criteria between phases of data collection, narrowing interview questions to specifically address contexts and interactions related to emergent concepts, and accessing literature to gain insight to phenomena I was observing and guide theoretical sampling (Conlon et al., 2020). After my initial analysis of data from the first phase of interviews, I identified a pattern of conflict between mothers and grandmothers, specifically paternal grandmothers. One change I made in the inclusion criteria for the second phase of data collection was to interview women who had given birth within the previous year, excluding women who gave birth at any point in the previous 10 years. I wanted to interview women who were having more immediate experiences and discuss the details of the conflicts. This change in inclusion criteria allowed me to verify the emergent pattern and include more detailed recollections of intergenerational conflicts related to breastfeeding. A review of the literature revealed the tremendous influence grandmothers have been cited to have on mothers' breastfeeding success, but lacked depth on specific challenges to communicating during conflicts, especially with mothers-in-law (Negin et al., 2016). This conflict-focused strategy of theoretical sampling also included more pointed questions about interactions with their mothers-in-law to interrogate my early observation that women were less willing to engage in disagreements with elders who were not biologically related.

Shadowed Data. Women's stories about breastfeeding often included more than their own personal experiences, which was particularly true for lactation consultants and midwives who interacted with a number of breastfeeding mothers. Women spoke of their observations on friends', family members', or clients' experiences with breastfeeding and the forms of breastfeeding support they received. This *shadowed data* accounts for contextual transferability of the data and goes beyond the experiences of those whose demographic characteristics are described in the previous chapter (Morse, 2001). Trends and themes found in the data about communication surrounding infant feeding decision-making were verified, both from within and outside the groups represented by the participants.

Researcher Bias. While I practiced reflexivity during data collection and analysis through journaling during fieldwork, debriefing with my co-researcher SH, and memo-writing, the iterative process revealed one particular bias that may be reflected in the findings. I recognized a pattern of mothers' disappointment with their husbands' resistance to learn about breastfeeding, which resonated with my feminist ideals and personal experiences. My choice to simply label the theme as *New mothers as fathers' educators* emphasizes the many responsibilities of mothers, some conflicting with others, each requiring an enormous amount of energy. While the details of my personal experiences were different (and irrelevant for this writing), I felt a visceral connection with women who expressed their frustration with the overburden they experienced as new mothers. The affinity I had for the disadvantage mothers discussed in relation to their husbands' inadequate support certainly influenced the frames I used to describe this theme.

Directions for Future Research

The majority of international breastfeeding scholarship has been grounded in positivist approaches, particularly focused on the relationship between intention and self-

efficacy, and breastfeeding behavior (e.g., Bai et al., 2011; Behera & Kumar, 2015; Fam, 2012; Nuzrina et al., 2016; Swanson et al., 2017; Tengku et al., 2016; Wambach, 1997). Future research should move beyond predictive models and focus more attention on the communication and co-creation of meaning related to breastfeeding experiences. Health communication scholars must continue work determining effective communication content and strategies to improve breastfeeding self-efficacy (much like the recent work by Zhuang et al., 2019), but public health approaches should include a more nuanced treatment of the issues.

Given the expansive geographical, ethnic, and religious diversity of Indonesia, studies should strive to represent the voices of a greater variety of women and support persons across the archipelago. Even though the present data contains perspectives from individuals residing on three islands, the extent of Indonesia's diversity and impact of local traditions is far greater than what is featured here. Conflicts between first-time mothers and grandmothers were common among participants, and many mothers felt that they did not receive the support they needed. Longitudinal analysis is needed to pinpoint turning points in a woman's breastfeeding experience and in her relationships with her support persons that impact her decision-making. Further research should also be conducted with populations in other low- and middle-income countries to understand how breastfeeding decisions and PI are affected by cultural beliefs and social norms in the areas where consequences for not breastfeeding are most significant. The 13 quantitative studies included in Negin et al.'s (2016) systematic analysis on a grandmother's influence on breastfeeding rates represent populations in nine countries spanning Asia (China, Taiwan, Thailand and Vietnam were included, but not Indonesia), South America, North America and Europe. Despite the expansive diversity among sample populations, the inconsistency among outcome measures (breastfeeding behavior) and the grandmother's characteristics (e.g., attitude or relationship with

mother) limits the validity of the conclusions synthesized by Negin et al. For example, conclusions from two studies conducted in Brazil infer that cohabitation with a grandmother has no effect on mothers' breastfeeding rates (Negin et al., 2016). These findings contradict the current findings on the role of an infant's grandmother on a mother's breastfeeding decisions, and Negin et al.'s systematic analysis overlooks the value of cultural context.

The social nature of decision-making should also be more closely examined in the context of breastfeeding. In the same vein, WHO has called for more qualitative research using a family-systems perspective to improve maternal and child health-promotion programs (WHO, 2015). Exploration of the issues through an ecological framework that includes perspectives from women and their partners, their lactation consultants, obstetricians, pediatricians, midwives, doulas, or in-home extended family members about decisions regarding infant feeding will provide a more comprehensive description of breastfeeding dilemmas. Furthermore, experience is also an incredibly powerful source of knowledge. Research may compare and contrast perspectives of primiparous and multiparous mothers to understand the implications o f a mother's tacit knowledge (gained from previous experiences) on breastfeeding problem-solving, decision-making, and social support.

Breastfeeding research often overlooks the imperative for social support (Marharlouei et al., 2018; Rakhshani & Mohammadi, 2009). Because of substantive differences between expert breastfeeding advice and local knowledge (myths), researchers should also examine differences and similarities in the forms and means of support mothers receive from family members versus professionals (e.g., lactation consultants). A comparative study of this nature could highlight the gaps in the two bodies of knowledge, and identify opportunities for breastfeeding education that extends beyond the mother as the primary audience.

Lastly, because of Indonesia's unique position in the landscape of breastfeeding promotion – with its federal law mandating breastfeeding for at least six months and disproportionately high infant mortality rate (The UN Inter-agency Group for Child Mortality Estimation, 2019) – future research should examine implications of breastfeeding policy on attitudes and practices. In the current research, nearly every mother who was asked about the law admitted to not knowing about it, which may demonstrate widespread ineffectiveness of the policy. The lack of knowledge about the policy among breastfeeding women that is intended to protect their interests reveals its shortcomings. By examining breastfeeding policy, scholars may identify the complex relationships between health services, providers, and policies so as to determine more effective approaches to breastfeeding promotion (Gerein et al., 2009).

Conclusion

If infant mortality rates in low- and middle-income countries are ever to decrease, then health care professionals need to become aware of the factors affecting the initiation *and* continuation of breastfeeding. Evidence such as the first-hand descriptions of breastfeeding experiences presented in the current research should serve as the basis informing public health policy and programming (Van Esterik, 2012). It is my hope that the current findings will serve as an invitation to breastfeeding advocates to include extended networks of support persons, namely fathers and grandmothers, in programming that promotes breastfeeding and are designed to establish effective support strategies. A senior official from *Save the Children* lamented, "Behaviour change needs support at every level, the family, the community, the government" (Williams, 2013, para. 22). Furthermore, the current findings demonstrate a need to revise current Indonesian policy (Labor Law No. 13/2003) that only grants paid leave from work for fathers for two days after the baby is born. In order for a man to learn his new baby's

needs as well as his wife's, policy should allow men to spend more time with their new families without financial strain.

Given the global breastfeeding promotion priorities held by virtually every medical and public health organization, it is especially important to understand Indonesian women's experiences within their unique context. Several grassroots organizations and NGOs such as AIMI and Plan International, whose staff helped facilitate the current research, have undertaken the responsibility to activate the community in support of breastfeeding. A relatively newer grassroots organization focused on the role of Indonesian fathers' breastfeeding support, Ayah ASI, has been building a peer network to guide and encourage men to reach their potential as support providers by sharing evidence-based information about the biology of lactation and breastfeeding through social media (Ayah ASI, 2020). Ayah ASI grew out of social media posts from AIMI's leadership about the importance of a supportive father's role on a mother's breastfeeding success, which demonstrates the powerful impact grassroots advocacy may have (Riski, 2018). Despite its expansive reach through social media, Ayah ASI's efforts are limited to young, middle-class, educated, and urban men, which overlooks a sizeable portion of population in Indonesia (Riski, 2018). Another father-focused breastfeeding support organization in Bali has also been active in engaging fathers to motivate their wives to breastfeed as well as calling for two weeks paid paternity leave (van Bemmelen, 2015).

Social support undoubtedly will remain an important aspect of women's experiences and dilemmas with breastfeeding. Communication researchers have an obligation to explore the nature of the talk that occurs surrounding health decision-making, and recognizing ways to equip support person's with knowledge and strategies to provide effective and helpful breastfeeding support. There is both theoretical and practical value in understanding the relational and communicative dimensions that

contribute to perceived supportiveness in the context of breastfeeding. As we develop more precise understanding of breastfeeding support, we increase our chances of being supportive ourselves and teaching others to offer support that is helpful, and meaningfully beneficial to the next generation of mothers.

Appendix A
Memo of Understanding with Sri Handayani

SCHOOL OF LIBERAL ARTS
INDIANA UNIVERSITY
Department of Communication Studies
IUPUI

Date: March 1, 2018
To: Sri Handayani, Dian Nuswantoro University
From: Nicole Johnson, Indiana University
Subject: Local Research Counterpart Memorandum of Understanding, Summer 2018 Breastfeeding Research program

The purpose of this research is to explore how Indonesian women communicate about their decisions feeding their infants. Mothers and support persons will be interviewed. The interviews will be transcribed and analyzed to highlight themes reflecting how cultural norms impact breastfeeding decision-making. Findings from this research will be disseminated through academic and practitioner channels to advance theoretical understanding as well as improve breastfeeding promotion efforts.

Sri Handayani, as the local research counterpart, agrees to support this research by identifying and recruiting participants for interviews and/or focus groups, as well as provide feedback on data collection instruments and analysis conclusions to ensure cultural appropriateness and relevance.

In recognition for her support, Sri Handayani will be identified as an official contributor in all publications produced by this research project. This study has been acknowledged by the Institutional Review Board at Indiana University-Purdue University Indianapolis (protocol #1802311022), and is authorized until December 31, 2018.

This research project is being conducted by Principle Investigator Nicole Johnson, and is advised by Dr. Marianne Matthias, Associate Professor and Director of Graduate Studies, Department of Communication Studies, IUPUI, in partnership with Sri Handayani, faculty of health at Dian Nuwantoro University, Indonesia.

[redacted] [redacted]

Nicole Johnson, ABD
Graduate Research Assistant
Principle Investigator
Indiana University
nlj3@iupui.edu

Sri Handayani
Local Research Counterpart
Faculty, Public Health
Dian Nuswantoro University

425 University Boulevard Indianapolis, IN 46202-5140 (317) 274-0566 fax (317) 278-1025
Indiana University–Purdue University Indianapolis

Appendix B
Signed Agreement with AIMI

LETTER OF STATEMENT

The undersigned below:

Name: _Nicole Lynn Johnson_____
ID number: _[redacted]_____

(in case of foreign nationality, please provide passport number)

As a researcher from __Indiana University_ (*please fill with the name of your institution*), located at __425 University Blvd., Indianapolis, Indiana 46202 USA__ (*please fill with the address of your institution*) that in order to conduct a research entitled _Liquid Gold: A Qualitative Inquiry into Decision Making about Breastfeeding among Indonesian Women_(*please fill the title/theme of your research*), hereby declare that will hold a research collaboration with Asosiasi Ibu Menyusui Indonesia (AIMI) / Indonesian Breastfeeding Mothers' Association states as follows:

1. That in conducting cooperative research, AIMI reserves the right to refuse to provide data or information if deemed submitted requests to have a potential conflict of interest and/or contrary to the vision and mission AIMI.

2. That the result of a research collaboration will not be used for the benefit of the marketing, promotion, advertising, product sales associated with commercial breastmilk substitutes, including but not limited to:
a.! Infant formula products and / or baby food products;
b.! Dairy products for pregnant and lactating women, as well as commercial supplement/substance aimed at increasing breast milk supply (galactagogue).
c.! Baby bottles, teats and dummies for babies, nor any measures that violate **the International Code of Marketing of Breastmilk Substitutes** adopted by the World Health Assembly (WHA) of the World Health Organization (WHO) in 1981.

3. That we liberate AIMI of any suit or other legal actions if it turns out this statement failed to keep.

4. That we are willing to indemnify and face lawsuits / litigation as stipulated by the law in the Republic of Indonesia when this statement violated.

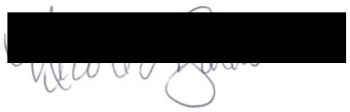
5. That we are willing to submit the results of this research in both softcopy and hardcopy to the Head of Research Division of AIMI as well as to the Secretariat of AIMI.

Hereby this statement is made truthfully and to be used accordingly.

__Indianapolis, IN USA__(place), 19 (date)/04(month)/2018(year)

Name and Signature

Nicole L. Johnson



Stamp of IDR 6.000
(_____)

Appendix C
Demographic Survey for Mothers

Survei – Memahami Keputusan dalam Pemberian Makanan pada Bayi
Survey – Understanding Infant Feeding Decisions Among Indonesian Mothers

Anda diminta untuk berpartisipasi dalam penelitian tentang bagaimana ibu membuat keputusan dalam memberikan makanan pada bayinya. Kami harapkan Anda membaca form ini dan silahkan bertanya jika ada pertanyaan, sebelum Anda menyetujui menjadi partisipan dalam penelitian ini.

Penelitian ini dilaksanakan oleh Nicole Johnson dari Jurusan Ilmu Komunikasi, Universitas Indiana di Indianapolis, Indiana, Amerika Serikat.

Sebagai partisipan dalam penelitian ini, Anda akan mengikuti wawancara yang memakan waktu hingga 1 jam, dan akan direkam menggunakan perekam audio digital. Anda juga akan mengisi kuesioner yang kurang lebih membutuhkan waktu 10 menit. Anda akan menerima pembayaran maksimal Rp. 100.000,- sebagai penggantian biaya transportasi yang Anda keluarkan untuk mengikuti penelitian ini. Risiko dari mengikuti penelitian ini antara lain kemungkinan ketidaknyamanan dalam menceritakan alasan Anda dalam mengambil keputusan memberikan makanan pada bayi Anda. Anda memiliki hak untuk tidak menjawab pertanyaan yang tidak ingin Anda jawab. Anda juga berhak meninggalkan wawancara kapanpun Anda merasa tidak nyaman untuk melanjutkan wawancara.
Meninggalkan wawancara tidak akan menyebabkan Anda mendapat penalti atau kehilangan manfaat apapun. Keputusan Anda untuk mengikuti ataupun tidak mengikuti penelitian ini tidak akan berdampak pada hubungan Anda saat ini atau di masa yang akan datang dengan Universitas Indiana atau IUPUI.

Data pribadi Anda akan dijaga kerahasiaannya. Jika Anda memilih untuk diwawancarai di lokasi yang semi-terbuka, maka saya tidak bisa menjamin penuh kerahasiaannya. Data pribadi Anda mungkin akan dibuka jika diminta oleh hukum. Identitas Anda akan dirahasiakan dalam laporan-laporan dimana hasil penelitian dipublikasikan. Setiap rekaman wawancara akan ditranskrip oleh sebuah layanan transkripsi, dan semua informasi identitas pribadi (misalnya nama, tempat) akan dihilangkan dari transkrip, dan nama akan diubah menjadi nama samaran. Semua data akan dilindungi dengan cara menyimpan semua rekaman audio dan dokumen transkrip dalam file yang diproteksi kata sandi dalam komputer dan online inbox saya yang juga diproteksi kata sandi. File rekaman akan dimusnahkan 5 tahun setelah pengambilan kesimpulan dalam penelitian. Semua berkas yang berhubungan dengan penelitian akan disimpan dalam koper terkunci selama saya di Indonesia, dan akan dikunci di kantor IUPUI saat saya kembali ke Amerika Serikat.

Organisasi yang dapat memeriksa dan atau menyalin data penelitian Anda untuk kepentingan jaminan kualitas dan analisis data antara lain kelompok-kelompok seperti peneliti dan/atau rekan penelitiannya, Indiana University Institutional Review Board atau atau yang ditunjuk, dan (sebagaimana diizinkan oleh hukum) lembaga negara atau federal, khususnya Kantor Perlindungan Penelitian pada Manusia (OHRP) yang mungkin membutuhkan akses pada rekaman penelitian Anda.

Untuk pertanyaan mengenai penelitian ini, Anda dapat menghubungi peneliti, Nicole Johnson, [redacted].

Untuk pertanyaan mengenai hak Anda sebagai partisipan atau mendiskusikan permasalahan, komplain atau kekhawatiran mengenai penelitian, atau untuk mendapatkan informasi, memberikan masukan, Anda dapat menghubungi IU Human Subjects Office +1(317) 278-3458 atau +1(800) 696-2949.

You are invited to participate in a research study of how women make decisions about feeding their babies. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Nicole Johnson from the Department of Communication Studies at Indiana University in Indianapolis, Indiana, United States.

As a participant in the study, you will take part in one interview that will last up to 1 hour, and will be recorded using a digital audio recorder. You will also fill out this survey that will take about 10 minutes to complete. You will receive up to $7 US payment as reimbursement for travel expenses related to taking part in this study. The risks of participating in this research include the potential for being uncomfortable sharing reasons for decisions about feeding your baby. You have the option to skip questions that you do not want to answer. You also have the option to leave the interview at any time if you feel too uncomfortable to proceed. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Indiana University or IUPUI.

Efforts will be made to keep your personal information confidential. Depending on if you chose to participate in the interview in a semi-private location, I cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. Each interview recording will be transcribed verbatim by a transcription service, and all identifying information (e.g., names, locations) will be removed from the transcripts, and names will be replaced with pseudonyms. The data will be protected by storing all audio files and transcript documents in password-protected files on my password-protected laptop and online in Box. Audio files will be destroyed five years after the conclusion of the project. Any paper documents associated with the project will be stored in a locked suitcase while I am in Indonesia, and upon return to the US Nicole Johnson's locked office on the IUPUI campus.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) who may need to access your research records.

For questions about the study, contact the researcher, Nicole Johnson, [redacted]

For questions about your rights as a resea√rch participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at +1(317) 278-3458 or +1(800) 696-2949.

Please answer the following questions:

1. Nama: (informasi ini hanya akan digunakan untuk mencocokkan survei denganwawancara, untukkeperluan tindak lanjut. Nama Anda, atau informasi indentitas lainnya, tidak akan digunakan dalam laporan apapun untuk penelitian ini). _____
   Name: (this information will only be used to match the survey to the interview for follow-up purposes. Your name, or any other identifying information, will not be used in any report for this research.)

2. Umur/*Age*: ____

3. Jenis Kelamin/*Gender*: □ laki-laki/*Male* □ perempuan/*Female*

4. Jumiah anak/*Number of Children*: _____
   a. Tahun berapa anak pertama Anda lahir? *What year was your first (oldest) child born?*_____
   b. Tahun berapa anak ke-dua Anda lahir? *What year was your second child born?* _____
   c. Tahun berapa anak ke-tiga Anda lahir? *What year was your third child born?* _____
   d. Tahun berapa anak ke-empat Anda lahir? *What year was your fourth child born?* _____
   e. Tahun berapa anak ke-lima Anda lahir? What year was your fifth child born? _____
   f. Tahun berapa anak ke-enam Anda lahir? What year was your sixth child born? _____
   g. Tahun berapa anak ke-tujuh Anda lahir? *What year was your seventh child born?* _____
   h. Tahun berapa anak ke-delapan Anda lahir? *What year was your eighth child born?* _____

5. Dimana anda melahirkan anak anda yang paling kecil? *Where did you give birth to your youngest child?*
   □ Rumah sakit umum/*Public Hospital*
   □ Rumah sakit swasta/*Private Hospital*
   □ Puskemas/*Community Health Centre*
   □ Rumah/*Home*
   □ Lainnya/*Other:* _____

6. Siapa yang membantu persalinan anak terkecil anda? *Who delivered your youngest child?*
   □ Dokter umum/*Doctor*
   □ Dokter kandungan/*Obstetrician*
   □ Bidan/Midwife/*Village Midwife*
   □ Perawat/*Nurse*
   □ Dukun/*Traditional Birth Attendant*
   □ Teman atau keluarga/*Friend/Family member*

 Tidak ada/*No one*
 Lainnya/*Other*: _____

7. Bagaiamana anda melahirkan anak anda yang paling kecil? *How was your youngest child born?*
 Normal/*Vaginal Birth* Cesar/*Cesarean Section*

8. Apakah Anda menyusui anak Anda yang paling kecil setidaknya satu kali?
Did you breastfeed your youngest child at least once?
 Ya/*Yes*
 Tidak/*No*

9. Apakah anda mulai menyusui anak terkecil anda dalam jangka waktu satu jam setelah kelahiran?
Did you begin breastfeeding your child within one hour after birth?
 Ya/*Yes*
 Tidak/*No*

10. Apakah ada yang menawarkan untuk memberikan susu ormula pada bayi Anda?
Did anyone offer to feed your baby with formula?
 Ya, Siapa yang menawarkan untuk memberikan susu formula pada anak Anda yang paling kecil? *Yes, Who offered to feed your youngest child formula?* _____
 Tidak/*No*

11. Berapa usia anak pertama Anda ketika Anda mulai mengenalkan makanan selain ASI?
How old was your first child when you introduced food other than breastmilk? ____
    a. Berapa usia anak ke-dua Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    b. Berapa usia anak ke-tiga Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    c. Berapa usia anak ke-empat Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    d. Berapa usia anak ke-lima Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    e. Berapa usia anak ke-enam Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    f. Berapa usia anak ke-tujuh Anda ketika Anda mulai mengenalkan makanan selain ASI? _____
    g. Berapa usia anak ke-delapan Anda ketika Anda mulai mengenalkan makanan selain ASI? _____

12. Pendidikan terakhir anda/*Highest Education level completed*:
 Tidak lulus sekolah/*None*
 SD/*Primary School*
 SMP/*Junior High School*
 SMA/*Senior High School*
 D3/*Diploma*
 S1, S2, S3/*Bachelor's, Master's, or Doctorate*
 Tidak tahu/*Don't know*

13. Berapa banyak orang yang tinggal dirumah anda? *How many people live in your home?* _____

14. Apakah orang tua anda atau mertua tinggal Bersama? Do *your parents or your husband's parents live with you?*
    - Ya/Yes
      Siapa yang tinggal dengan anda? *Whose parents live with you?*
      - Orang tua/Mine
      - Mertua/My husband's
    - Tidak/No

15. Wilayah tempat tinggal/*Residence type*:
    - Pedesaan/*Rural*
    - Perkotaan/*Urban*
    - Pinggiran kota/*Suburban*

16. Apakah anda mengkonsumsi air mineral botol ketika? *When you are at home, do you drink bottled water?*
    - Ya/Yes
    - Tidak/No
      Apa yang anda lukukan untuk memastikan air yang anda konsumsi aman? *What do you usually do to make the water safer to drink?*
      - Memasak air/*Boil the water*
      - Lainnya/*Other*: _____

17. Bagaimana anda menilai penghasilan keluarga anda/*When you consider your household income from all sources, would you say that you:*
    - Merasa cukup/*Are comfortable*
    - Cukup sempai dengan akhir bulan/*Have just enough to make ends meet*
    - Tidak cukup hingga akhir bulan/*Do not have enough to make ends meet*
    - Tidak tahu/*Don't know*

18. Apakah Anda bekerja/bekerja sendiri/wiraswasta? *Are you employed/self-employed/entrepreneur?*
    - Ya/*Yes*
    - Tidak/*No*

19. Dalam rata-rata, berapa lama anda bekerja dalam seminggu? *On average, how many hours per week do you work for pay?* _____

20. Siapa yang mempekerjakan anda? *Who is your employer?*
    - Wiraswasta/Enterpreneur
    - Diri sendiri/*Self-employed*
    - Anggota keluarga/*Family Member*
    - *Bukan anggota keluarga*/Non-family member

21. Pekerjaan seperti apa yang anda kerjakan? *What kind of work do you do?*
    - Administrasi perkantoran/*Clerical*
    - Professional/Technical/Managerial
    - Marketing/Sales and services
    - Pertanian/*Agriculture*

 Perindustrian/*Industrial*
 Lainnya/*Other*: _____

22. Apakah anda bersedia mengikuti wawancara lanjutan jika dibutuhkan? *Would you be willing to participate in a follow-up interview, if necessary?*
 Ya/*Yes*
 Tidak/*No*

23. Apakah anda bersedia mereview ulang hasil temuan wawancara saya dengan anda untuk memastikan keakuratan data? *Would you be willing to review a summary of my findings from your interview to confirm my accuracy?*
 Ya/*Yes*
 Tidak/*No*

24. Bagaiamana cara untuk menghubungi anda? *What is the best way to contact you?*
_____

Appendix D

Demographic Survey for Support Persons

Survei – Memahami Keputusan dalam Pemberian Makanan pada Bayi
Survey – Understanding Infant Feeding Decisions

Anda diminta untuk berpartisipasi dalam penelitian tentang bagaimana ibu membuat keputusan dalam memberikan makanan pada bayinya. Kami harapkan Anda membaca form ini dan silahkan bertanya jika ada pertanyaan, sebelum Anda menyetujui menjadi partisipan dalam penelitian ini.

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Sebagai partisipan dalam penelitian ini, Anda akan mengikuti wawancara yang memakan waktu hingga 1 jam, dan akan direkam menggunakan perekam audio digital. Anda juga akan mengisi kuesioner yang kurang lebih membutuhkan waktu 10 menit. Anda akan menerima pembayaran maksimal Rp. 100.000,- sebagai penggantian biaya transportasi yang Anda keluarkan untuk mengikuti penelitian ini. Risiko dari mengikuti penelitian ini antara lain kemungkinan ketidaknyamanan dalam menceritakan alasan Anda dalam mengambil keputusan memberikan makanan pada bayi Anda. Anda memiliki hak untuk tidak menjawab pertanyaan yang tidak ingin Anda jawab. Anda juga berhak meninggalkan wawancara kapanpun Anda merasa tidak nyaman untuk melanjutkan wawancara.
Meninggalkan wawancara tidak akan menyebabkan Anda mendapat penalti atau kehilangan manfaat apapun. Keputusan Anda untuk mengikuti ataupun tidak mengikuti penelitian ini tidak akan berdampak pada hubungan Anda saat ini atau di masa yang akan datang dengan Universitas Indiana atau IUPUI.

Data pribadi Anda akan dijaga kerahasiaannya. Jika Anda memilih untuk diwawancarai di lokasi yang semi-terbuka, maka saya tidak bisa menjamin penuh kerahasiaannya. Data pribadi Anda mungkin akan dibuka jika diminta oleh hukum. Identitas Anda akan dirahasiakan dalam laporan-laporan dimana hasil penelitian dipublikasikan. Setiap rekaman wawancara akan ditranskrip oleh sebuah layanan transkripsi, dan semua informasi identitas pribadi (misalnya nama, tempat) akan dihilangkan dari transkrip, dan nama akan diubah menjadi nama samaran. Semua data akan dilindungi dengan cara menyimpan semua rekaman audio dan dokumen transkrip dalam file yang diproteksi kata sandi dalam komputer dan online inbox saya yang juga diproteksi kata sandi. File rekaman akan dimusnahkan 5 tahun setelah pengambilan kesimpulan dalam penelitian. Semua berkas yang berhubungan dengan penelitian akan disimpan dalam koper terkunci selama saya di Indonesia, dan akan dikunci di kantor IUPUI saat saya kembali ke Amerika Serikat.

Organisasi yang dapat memeriksa dan atau menyalin data penelitian Anda untuk kepentingan jaminan kualitas dan analisis data antara lain kelompok-kelompok seperti peneliti dan/atau rekan penelitiannya, Indiana University Institutional Review Board atau atau yang ditunjuk, dan (sebagaimana diizinkan oleh hukum) lembaga negara atau federal, khususnya Kantor Perlindungan Penelitian pada Manusia (OHRP) yang mungkin membutuhkan akses pada rekaman penelitian Anda.

Untuk pertanyaan mengenai penelitian ini, Anda dapat menghubungi peneliti, Nicole Johnson, [redacted].
Untuk pertanyaan mengenai hak Anda sebagai partisipan atau mendiskusikan permasalahan, komplain atau kekhawatiran mengenai penelitian, atau untuk

mendapatkan informasi, memberikan masukan, Anda dapat menghubungi IU Human Subjects Office +1(317) 278-3458 atau +1(800) 696-2949.

You are invited to participate in a research study of how women make decisions about feeding their babies. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Nicole Johnson from the Department of Communication Studies at Indiana University in Indianapolis, Indiana, United States.

As a participant in the study, you will take part in one interview that will last up to 1 hour, and will be recorded using a digital audio recorder. You will also fill out this survey that will take about 10 minutes to complete. You will receive up to $7 US payment as reimbursement for travel expenses related to taking part in this study. The risks of participating in this research include the potential for being uncomfortable sharing reasons for decisions about feeding your baby. You have the option to skip questions that you do not want to answer. You also have the option to leave the interview at any time if you feel too uncomfortable to proceed. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Indiana University or IUPUI.

Efforts will be made to keep your personal information confidential. Depending on if you chose to participate in the interview in a semi-private location, I cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. Each interview recording will be transcribed verbatim by a transcription service, and all identifying information (e.g., names, locations) will be removed from the transcripts, and names will be replaced with pseudonyms. The data will be protected by storing all audio files and transcript documents in password-protected files on my password-protected laptop and online in Box. Audio files will be destroyed five years after the conclusion of the project. Any paper documents associated with the project will be stored in a locked suitcase while I am in Indonesia, and upon return to the US Nicole Johnson's locked office on the IUPUI campus.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) who may need to access your research records.

For questions about the study, contact the researcher, Nicole Johnson, +[redacted]

For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at +1(317) 278-3458 or +1(800) 696-2949.

Please answer the following questions:

1. Nama: (informasi ini hanya akan digunakan untuk mencocokkan survei denganwawancara, untukkeperluan tindak lanjut. Nama Anda, atau informasi indentitas lainnya, tidak akan digunakan dalam laporan apapun untuk penelitian ini). _____
   Name: (this information will only be used to match the survey to the interview for follow-up purposes. Your name, or any other identifying information, will not be used in any report for this research.)

2. Umur/*Age*: ____

3. Jenis Kelamin/*Gender*:
   □ laki-laki/*Male* □ perempuan/*Female*

4. Apakah peran Anda dalam mendukung keputusan ibu terkait pemberian makan pada bayinya?
   What is your role in supporting a mother's decisions about feeding her baby?
   □ Suami/*Her husband*
      Berapa jumlah anak yang anda miliki? *How many children do you and your wife have?* _____
      Do either your parents or your wife's parents live with you?
         □ Ya/*Yes*
            Siapa yang tinggal dengan anda? *Whose parents live with you?*
               □ Orang tua/*My Parents*
               □ Mertua/*My wife's parents*
               □ Tidak/*No*
   □ Ibu/*Her Mother*
   □ Ibu mertua/*Her Mother-in-Law*
   □ Nenek/Kakek/*Her Grandparent*
   □ Nenek/Kakek dari suami/*Her Husband's Grandparent*
   □ Saudara/*Her Sibling*
   □ Teman/*Her Friend*
   □ Konsultan menyusui/*Lactation Consultant or Counsellor*
   □ Bidan/*Midwife*
   □ Perawat/*Nurse*
   □ Dukun/*Traditional Birth Attendant*
   □ Lainnya/*Other*: _____

5. Apakah anda tinggal dengannya? *Do you live with her?*
   Ya/*Yes*
   Berapa banyak orang yang tinggal dengan anda? *How many people live in your home?* _____
      Wilayah tempat tinggal/*Residence type*:
      Pedesaan/*Rural*
      Perkotaan/*Urban*
      Pinggiran kota/*Suburban*
   Tidak/*No*

6. Apakah anda mengkonsumsi air mineral botol ketika?
   When you are at home, do you drink bottled water?
      Ya/Yes
      Tidak/No
         Apa yang anda lukukan untuk memastikan air yang anda konsumsi aman?
         What do you usually do to make the water safer to drink?
         Memasak air/*Boil the water*
         Lainnya/*Other*: _____

7. Pendidikan terakhir anda/*Highest Education level completed*:
   Tidak lulus sekolah/*None*
   SD/*Primary School*
   SMP/*Junior High School*
   SMA/*Senior High School*
   D3/*Diploma*
   S1, S2, S3/*Bachelor's, Master's, or Doctorate*
   Tidak tahu/*Don't know*

8. Bagaimana anda menilai penghasilan keluarga anda/*When you consider your household income from all sources, would you say that you:*
   Merasa cukup/*Are comfortable*
   Cukup sempai dengan akhir bulan/*Have just enough to make ends meet*
   Tidak cukup hingga akhir bulan/*Do not have enough to make ends meet*
   Tidak tahu/*Don't know*

9. Apakah Anda dibayar untuk memberikan dukungan pada ibu ini? *Are you paid to provide support to the woman?*
   Ya/*Yes* Tidak/*No*

10. Apakah anda bersedia mengikuti wawancara lanjutan jika dibutuhkan? *Would you be willing to participate in a follow-up interview, if necessary?*
    Ya/*Yes* Tidak/*No*

11. Apakah anda bersedia mereview ulang hasil temuan wawancara saya dengan anda untuk memastikan keakuratan data? *Would you be willing to review a summary of my findings from your interview to confirm my accuracy?*
    Ya/*Yes* Tidak/*No*

12. Bagaiamana cara untuk menghubungi anda? *What is the best way to contact you?*
    _____

Appendix E

Interview Guide for Mothers

Infant Feeding (Mothers) Interview Guide

1) Motherhood is full of big decisions. **Tell me about some of the decisions you've made concerning your baby(ies) that you spent a lot of time thinking and talking about.**

2) **How would you describe the support in your community for new mothers?**
   a) What resources do you have available to help you as a mother?
      (1) Places to go? People to call?

3) **Tell me about how you fed your last baby for the first six months.**
   a) What was the most important thing to you about feeding your baby?
      (1) What has gone well in feeding your baby?
      (2) What has not gone well?
      (3) What is the most surprising thing about feeding your baby that you have learned?
   b) Did you ever seek help for breastfeeding?
      (1) From who? [if a pro] How did you find them? What was the cost for the service?
      (2) How much would you be willing to pay for that service?
      (3) Would you recommend their service to a close friend?
      (4) How do you feel about that person's help?
         (a) What did they do/say to be helpful?
         (b) What was not helpful?
         (c) What sorts of things did you talk to them about?
         (d) What kinds of help do you wish you had received but did not?

4) Did you have a plan for how you were going to feed your baby before they were born?
   a) If so, what was the plan?
      i) How did you decide on your plan?
      ii) What was most important to you when you made this plan?
      iii) How did you develop this plan? (i.e. read books? talk to someone?)
      iv) How easy or hard did you think your plan would be?
   b) What were your expectations for feeding your baby?
      i) Did things go as you expected?
         (a) Why do you think it went as expected?
         (b) If not, what went differently?
   c) Did you do anything to help your body produce milk immediately after birth? If yes, what?
      i) Do you feel like you were able to stick with that plan?
         (1) (yes) What led you to feel that you were able to stay with your plan?
            (a) What were the major problems for following your plan?
         (2) (no) What led you to feel that had to change your plan?
            (a) Who did you talk to about these changes?
            (b) How do you feel about having to change your plan?
   d) Looking back, is there anything you wish you had known that you didn't know at the time about feeding your baby?

(1) [if yes] How do you feel about that?

5) How did you first begin feeding your baby? (tell me about the first couple times you fed your baby)
   a) How did that go?
      i) Did it go as you expected?
      ii) Who helped you handle problems?
         (1) How did they help you?
      iii) What led you to stop breastfeeding?
         (1) Who did you talk to about your decision?
         (2) When did you make that decision?
         (3) How did you feel about that decision?
         (4) Did you talk to anyone about it before you made the final decision?
            (a) Who?
            (b) How did that conversation go?

6) How did other people react to the way you were feeding your baby?
   a) What are some specific examples of memorable reactions?
   b) Please explain the context: Where were you?
      i) Who?
      ii) What was their reaction?
      iii) How did you respond?
      iv) How does/did that make you feel?
      v) Did the reaction cause you to change the way you feed your baby? (i.e. change location, express milk instead of nurse the baby, use apron/protective cloth?)

7) What sorts of information did you pay attention to about feeding babies before your baby was born?
   a) Can you think of specific resources that you read or watched?
      (1) Are you familiar with KellyMom?
      ii) Do you feel like reading or watching videos has been enough?
   b) What is the best way to learn about feeding your baby?
   c) Where did you look for information? Who did you ask? Who gave you the info?
   d) Did anyone offer info to you without being asked?
      i) If yes, what did they share with you?
      ii) If yes, how did that make you feel?
      iii) How was this information helpful?
      iv) How believable was this info?
      v) What made the info believable?
      vi) What kinds of information caused problems for you?
      vii) How so?
   e) What information do you wish you had?
   f) What information do you wish you *didn't* look up?

8) Who do you rely on the most for advice about feeding your baby?
   a) What kind of relationship do you have with them?
      i) Why did you choose to talk to them about feeding your baby?
   b) What sorts of topics do you talk about?
   c) Do they ever ask you any questions about how you're feeding your baby?
   d) Have you ever disagreed with their advice?

i) If yes, how have you handled that?

9) What do you know about Indonesia's breastfeeding law?
   a) How did you learn about this law?
      i) [if no, explain, then ask] What are your general feelings about this law?
   b) Have you spoken to anyone about this law?
      i) Who?
      ii) What did you talk about concerning this law?
   c) How has the law affected the way you feed your baby? Or how has the law affected your decision to breastfeed?
   d) How does the law make you feel about your decisions to feed your baby?

10) What problems have you faced while breastfeeding?
   e) Who did you talk to about that?
      i) How did those conversations go?
      ii) Were they helpful?
      iii) How did you overcome those challenges?
      f) How do you know that your baby is getting enough to eat?
         (1) [choose formula] what led you to choose formula?
      ii) How did you feel about this decision? Describe the process.
      iii) What are the advantages & disadvantages feeding your baby formula?
      iv) What is the biggest benefit of using formula for you?

11) Is there anything you do about feeding your baby that other people don't do based on something someone close to you told you?
   g) What myths have you been told about breastfeeding and breastmilk?
      i) Who shared these with you?
      ii) Do you make decisions based on these beliefs?
      iii) How did you discover this was a myth?
      iv) Have you discussed the inaccuracy of information with the person who told you?
         (1) How did that conversation go?

12) If you work outside of the home, what is it like to pump breastmilk while at work?
   h) How easy is it to pump breastmilk while at work?
   i) What sorts of things do you talk to your coworkers about related to motherhood/breastfeeding?
   j) What is the environment like at work? Do you feel supported as a breastfeeding mother?
   k) What could your employers/co-workers do to support you while you are breastfeeding your baby?

13) If you have another baby, do you plan to approach feeding differently?
   l) What led you to think about doing it differently in the future?

14) What advice would you give to a woman who is pregnant today about feeding her baby?
   m) What advice about breastfeeding/feeding your baby do you wish someone had shared with you before you had your baby?

15) In your opinion, is there any good reason not to breastfeed a baby?

n) **Is there any unacceptable reason to choose formula?**
o) Is there a connection between baby blues and the way a woman feeds her baby?
p) What does being a good mother mean to you?
q) What do good mothers do?
r) What else do you think you could have done for you baby?
s) Tell me why you believe that?

16) Is there anything else you would like for me to know about your experiences feeding your baby?

Appendix F

Interview Guide for Support Persons

Infant Feeding (Support Persons) Interview Guide

***[the woman] language will change depending on the interviewee's role in the mother's life*

1) Describe your relationship with [the woman].
   a) Before the baby.

2) Describe how your relationship with [the woman] has changed after her baby was born.

3) Motherhood is full of big decisions. **Tell me about some of the decisions you've talked about with women.**
   a) Why do you think she wanted to talk about XYZ?
      i) Why was this issue so important to her?
   b) What are the most common questions you hear from women?

4) **Tell me about what you discussed with her concerning feeding for the first six months.**
   a) What kinds of things did you discuss about breastfeeding?
   b) What sorts of questions/worries did she have?
   c) What kinds of things did you say when you talked about these decisions?
   d) How do you think she feels about the discussions you two had?
      i) How do you feel about them?

5) Did you discuss how [the woman] was going to feed her baby before the baby was born?
   a) If so, what was the plan?
   b) How involved were you in making that plan?
   c) Looking back, is there anything you wish you had shared with her that you didn't at the time?
      i) [if yes] How do you feel about that?
   d) How closely did [the woman] follow her original plan once the baby was born?
      i) Did [the woman] change her plan after the baby was born?
      ii) What role did you have in any changes to the plan?
         (1) How do you feel about your role?
         (2) What sorts of things did you discuss?
         (3) What made it hard for her to carry out her plan?
         (4) What were [the woman's] biggest concerns?
         (5) How did talking to her about these challenges make you feel?
         (6) How would you describe your response/support to her concerns?
            (a) Would you say that you were able to provide the support she needed/wanted?

6) **What kinds of advice or help did you offer [the woman]?**
   a) How do those conversations start?
      i) Did you bring the topic up? Or did she?
   b) Why do you think she came to you for advice?

c) Is there ever a time when it's better for a mom not to research an issue about breastfeeding?
d) What/who are the best resources for breastfeeding information?
e) Is there ever a time when you think it's better if a mother did NOT research her concerns?
f) Describe the kind of responses/reactions *you* had while having these conversations with her.
i) **Describe *her* responses/reactions.**

7) What sorts of things did you talk about with [the woman] about feeding babies before her baby was born?
a) Where did you find this information?
b) How was this information helpful?

8) What do you know about Indonesia's breastfeeding law?
a) [if yes] How/where did you learn about this law?
b) [if no, explain the law]
c) What are your general feelings about this law?
d) How do you think this law influences a woman's decision to breastfeed?
e) Have you spoken to [the woman] about this law?
i) What did you talk about concerning this law?
ii) How does the law make you feel about [the woman's] decisions to feed her baby?

9) How would you rate the support in your community for new mothers?
a) What are some examples?

10) What advice about infant feeding would you give to someone who is supporting a woman who is pregnant today?
a) What are the biggest questions about breastfeeding that new mothers have?
b) What are the best ways to address those concerns?

11) What is your opinion of mothers who choose to use formula?
a) Are there reasons that are unacceptable for choosing formula?
b) Do you think that there is a connection between the baby blues and how a woman chooses to feed her baby?
c) What does *being a good mother* mean to you?
d) What do good mothers do?

12) Is there anything else you would like to add about how you talk to women about their decisions to feed their babies?

Appendix G

Request for Support to AIMI

SCHOOL OF LIBERAL ARTS
INDIANA UNIVERSITY
Department of Communication Studies
IUPUI

Date: April 17, 2018
To: AIMI Indonesia
From: Nicole Johnson, Indiana University
Subject: Request for Support, Summer 2018 Breastfeeding Research program

The purpose of this research is to explore how Indonesian women communicate about their decisions feeding their infants. Mothers and support persons will be interviewed. The interviews will be transcribed and analyzed to highlight themes reflecting how cultural norms impact breastfeeding decision-making. Findings from this research will be disseminated through academic and practitioner channels to contribute to improving breastfeeding promotion efforts as well as advance theoretical understanding. In addition, summary reports will be provided to any requesting and/or supporting organization or individual.

As a potential supporting partner in this research, I am requesting help in the following areas:

A) Identify and recruit participants for interviews and/or focus groups
   a. Participant eligibility criteria:
      i. Mothers:
         1. women born and raised in Indonesia
         2. 18 years of age or older
         3. have given birth since 2009
         4. breastfed their baby at least once
      ii. Support persons:
         1. men & women born and raised in Indonesia
         2. 18 years of age or older
         3. have provided support to a women who has given birth since 2009 and breastfed their baby at least once (i.e., husbands, midwives, lactation consultants and councellors)
   b. Recruitment goals:
      i. Participants should represent all education and socioeconomic levels
      ii. At least 50 mothers
      iii. At least 50 support persons

B) Conduct audio recorded interviews/focus group discussions in Bahasa Indonesia
   a. Interviews/FGDs should be scheduled to be conducted while I am in Indonesia (schedule below), so that I may observe
   b. However, if the participant is comfortable doing the interview in English, I may conduct the interview

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Indiana University–Purdue University Indianapolis

Appendix H

Request for Support to Plan International, Inc.

SCHOOL OF LIBERAL ARTS
INDIANA UNIVERSITY
Department of Communication Studies
IUPUI

Date: September 10, 2018
To: Mrs. Dini Widiastuti, Executive Director of Yayasan Plan International Indonesia
From: Nicole Johnson, Indiana University
Subject: Request for Support, Fall 2018 Breastfeeding Research program

The purpose of this research is to explore how Indonesian women communicate about their decisions feeding their infants. Mothers and support persons will be interviewed. The interviews will be recorded, transcribed and analyzed to highlight themes reflecting how cultural norms impact breastfeeding decision-making. Findings from this research will be disseminated through academic and practitioner channels to contribute to improving breastfeeding promotion efforts as well as advance theoretical understanding. In addition, summary reports will be provided to any requesting and/or supporting organization or individual.

As a potential supporting partner in this research, I am requesting help in the following areas:

A) Participate in a key informant interview as a professional working in an organization that promotes breastfeeding to teach the principle investigator about the current programs and context surrounding mothers regarding infant feeding.

B) Identify and recruit participants for interviews

- a. Participant eligibility criteria:
  - i. Mothers:
    1. women born and raised in Indonesia
    2. 18 years of age or older
    3. have given birth since 2009
       - a. Of particular interest: Have given birth in past 2 years
    4. have chosen to feed their baby formula within the first year
  - ii. Support persons:
    1. men & women born and raised in Indonesia
    2. 18 years of age or older
    3. have provided support to a women who has given birth since 2009 and breastfed their baby at least once (i.e., husbands, midwives, lactation consultants and councellors)
       - a. Of particular interest: Husbands and Midwives
- b. Recruitment goals:
  - i. Participants should represent all education and socioeconomic levels
    1. Of particular interest: participants with high school education or less, and from lower socioeconomic levels

425 University Boulevard Indianapolis, IN 46202-5140 (317) 274-0566 fax (317) 278-1025
Indiana University–Purdue University Indianapolis

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Yohmi, E., Marzuki, N. A., Nainggolan, E., Partiwi, I. G. A. N., Syarif, B. H., & Oswari, H. (2016). Prevalence of exclusive breastfeeding in Indonesia: A qualitative and quantitative study. *Paediatrica Indonesiana, 55*(6), 302-308. https://doi.org/10.14238/pi55.6.2015.302-8

Zhuang, J., Bresnahan, M. J., Yan, X., Zhu, Y., Goldbort, J., & Bogdan-Lovis, E. (2019). Keep doing the good work: Impact of coworker and community support on continuation of breastfeeding. *Health Communication, 34*(11), 1270-1278. https://doi.org/10.1080/10410236.2018.1476802

Curriculum Vitae

Nicole Lynn Johnson

EDUCATION

PhD, Health Communication • September 2020
Indiana University, at Indiana University-Purdue University Indianapolis, Indianapolis, IN
Specialization: Communication for Social Change
Advisor: Dr. Marianne Sassi Matthias
MA, Communication Studies • May 2006
Ball State University, Muncie, IN
Specialization: Organizational & Professional Communication Development
BS, Communication, Media & Technology • May 2004
La Roche College, Pittsburgh, PA

SCHOLARSHIP

❑ Publications

7. **Johnson, N. L.**, Scott, S. F., & Brann, M. A. (2020). "Our birth experiences are what binds us": Women's motivations for storytelling about birth to build Motherwisdom. *Communication Studies.*
6. **Johnson, N. L.**, Head, K. J., Scott, S. F., & Zimet, G. (2020). Knowledge and sociodemographic determinants of cervical cancer screening behaviors in American women. *Public Health Reports.*
5. Shin, Y., & **Johnson, N. L.** (in press). Testing Smokers' Media and Community Recourse Awareness for Tobacco Cessation. *Health and New Media Research.*
4. Head, K. J., **Johnson, N. L.**, Scott, S. F., & Zimet, G. (2019). Communication of cervical cancer screening results at federally qualified health centers in Indiana. *Health Communication.* Advance online publication. doi: 10.1080/10410236.2019.1593079
3. **Johnson, N. L.** (2019). Health information-seeking behaviors and disparities among patients with type 2 diabetes: Testing predictors of the frequency of HISB with doctors and online. *Ohio Communication Journal.*
2. Matthias, M. S., **Johnson, N. L.**, Shields, C. G., Bair, M. J., MacKie, P., Huffman, M., & Alexander, S. C. (2017). "I'm not gonna pull the rug out from under you": Patient-provider communication about opioid tapering. *Journal of Pain*, *18*(11), 1365-1373. https://doi.org/10.1016/j.jpain.2017.06.008
1. Bergmaier, M. J. & **Johnson, N. L.** (2017). Fragmentation and rapprochement: The case for paradigm collaboration. *Argumentation and Advocacy, 53*(2), 103-117. https://doi.org/10.1080/00028533.2017.1304996

❑ Published Abstracts

1**. Johnson, N. L.**, Shields, C., Alexander, S. C., Bair, M., MacKie, P., Huffman, M., & Matthias, M. S. (2017). Opioid tapering in patients with chronic pain: A qualitative study of patient and provider experiences. *Journal of General Internal Medicine*

❑ **Applied Research**

4. Brann, M. A. & **Johnson, N. L.** *Reducing injury in Indiana: Evaluation of awareness, use, and perceptions of Indiana's injury prevention resource guide.* Indianapolis, IN: Department of Communication Studies, Indiana University-Purdue Indianapolis, 2016.
3. Strategic Communication Plan for Lung Cancer Screening campaign, Richard L. Roudebush Veterans Affairs Medical Center, October 2015 as part of the Interprofessional Experience program *(major contributions: facilitated planning structure, designed survey instrument, collected data for formative assessment for messaging, collaborated on all decisions for messaging strategies, co-presented campaign proposal)*
2. Strategic Communication Plan for Injury Prevention Resource Guide promotion, Indiana Department of Health, April 2015 as part of Health Communication Dissemination course (C591), Professor: Dr. Maria Brann *(major contributions: collaborated equally on all decisions for communication strategies to promote the guide to Indiana Department of Children Services, designed survey instrument for formative assessment of attitudes and messaging strategies)*
1. **Johnson, N. L.** & Coombs, D. Formative Program Evaluation of MHA Indy's Teen Text Project, Mental Health America of Greater Indianapolis, December 2014 as part of Health Policy and Program Evaluation course (H658), Professor: Dr. Dennis Watson

❑ **Under Review**

3. Matthias, M. S., Bair, M. J., Ofner, S., Heisler, M., Kukla, M., McGuire, A. B., Adams, J., Kempf, C., Pierce, E., Menen, T., McCalley, S., **Johnson, N. L.**, & Daggy, J. Peer support for self-management of chronic pain: The Evaluation of a peer Coach-Led Intervention to improve Pain Symptoms (ECLIPSE) trial
2. Scott, S. F., Head, K. J., **Johnson, N. L.**, Kruer, K., & Zimet, G. Communication positive HPV test results: A directed content analysis of diverse vulnerable women's preferences utilizing self determination theory.
1. Shin, Y., & **Johnson, N. L.** Does the state smoke-free air law affect Indiana adult smoking attitude, intention, and behavior?

❑ **Works in Progress**

6. **Johnson, N. L.** Exploring African American Veterans' Experiences and Preferences for Using My HealtheVet for Managing Type 2 Diabetes (data collection in progress)
5. Shin, Y., & **Johnson, N. L.** Mexican-heritage young adult experience of emotional parentification during adolescence (data analysis in progress)
4. **Johnson, N. L.**, & Shin, Y. Exploring cultural predictors of complementary alternative medicine utilization: A Structural Equation Model (secondary data analysis in-progress)
3. **Johnson, N. L.** Understanding Cultural Implications on Burmese Immigrants' Communication with Healthcare Providers (data collection in progress)
2. **Johnson, N. L.**, Harsin, A.M., Zajac, R., & Parrish-Sprowl, J. How Polish Smokers Decide to Quit: An Examination of Relationships between Health Literacy and Health Information Seeking Behaviors (manuscript in-progress)
1. **Johnson, N. L.**, Handayani, S., & Parrish-Sprowl, J. The role of health literacy in quitting tobacco in Indonesia: A descriptive correlational analysis (manuscript in-progress)

GRANTS & FUNDED RESEARCH

5. Waterhouse Family Institute Dissertation Award, Villanova University, $1,000, April 2018
4. Plater International Scholarship for Community Engagement, IUPUI, $800, Spring 2015
3. Innovation to Enterprise Central, Office for the Vice Chancellor of Research, IUPUI, $1,000, Fall 2014
2. Democracy Institute, Penn State University, $1,200, April 2013 (co-authored with Dr. Michael Bergmaier)
1. US Universities Debating Championship Expansion Initiative, $1,800, April 2012

AWARDS

Outstanding Academic Achievement Award, Department of Communication Studies, IUPUI, April 2020

Top Paper, Health Communication Division, Central States Communication Association, Omaha, NE, April 2019

Leadership Challenge Annual Meeting Scholarship, American Public Health Association, Student Assembly, July 2016

IUPUI School of Liberal Arts Survey Research Award, "How Polish Smokers Decide to Quit: An Examination of Relationships between Health Literacy and Health Information Seeking Behaviors", co-authored with Amanda Harsin & Rachel Zajac, $1,500, March 2016

Top Graduate Student Paper, Department of Communication Studies, IUPUI
- "Profits in the Supposed Interest of Patients: Turing Pharmaceuticals' Rhetorical Apologia for its Landmark 5,000% Drug Price Hike", April 2016
- "How Polish Smokers Decide to Quit: An Examination of Relationships between Health Literacy and Health Information Seeking Behaviors", co-authored with Amanda Harsin & Rachel Zajac, April 2016
- "The Great Cultural-Digital Divide: Extending research to understand racial and ethnic impacts on Internet-based Patient Portal usage", April 2015

IUPUI School of Liberal Arts nominee, Herman B. Wells Fellowship, November 2015
Winning Proposal, IUPUI Inter-Professional Experience Program II, "Command Your Health: Empowering Veterans in Lung Cancer Screening with PACT+", October 2015

IUPUI International Experience Scholarship, $1,000, April 2015

Top Paper Panel, Central States Communication Association, Madison, WI, April 2015

Sherry Queener Graduate Student Excellence Award, School of Liberal Arts Nominee, March 2015

Conference Travel Awards
- Departmental Travel Grant, Department of Communication Studies, IUPUI, $500, Nov. 2016, Jan. 2016, March 2018, March 2019

Early Career Professionals Network travel award, Society for Prevention Research, $500, May 2016
Departmental Travel Grant, Department of Communication Studies, IUPUI, $250 Jan. 2015
Petronio-Bantz Travel Award, Department of Communication Studies, IUPUI, $500 September 2014

Indiana Rural Health Association's Annual Conference scholarship, $200, June 2014

Outstanding Coach Award, National Educational Debate Association (NEDA), April 2013, 2014

Extraordinary Service Award, College of Communication, Information and Media, BSU, August 2013

Top Paper Panel, National Communication Association Argumentation & Forensics Division, November 2011

Outstanding Teaching Award, Central States Communication Association, April 2010

CONFERENCE/PAPER PRESENTATIONS

29. Scott, S. F., Head, K. J., **Johnson, N. L.**, Kruer, K., & Zimet, G. (2019, November). Communicating positive HPV test results: A directed content analysis of at-risk women's preferences utilizing self determination theory. Paper panel presentation. National Communication Association Annual Convention, Baltimore, MD.
28. **Johnson, N. L.** (2019, April). The Presence of a Problem? Cultural differences on breastfeeding challenges and communication across 3 islands in Indonesia. Poster presentation. DC Health Communication Conference, Fairfax, VA.
27. **Johnson, N. L.**, Scott, S. F., & Brann, M. A. (2019, April). "Our birth experiences are what binds us": Women's motivations for storytelling about birth to build Motherwisdom. Paper panel presentation. Central States Communication Association Annual Conference, Omaha, NE. ***Top Paper Award in Health Communication Division**
26. Scott, S. F., **Johnson, N. L.**, & Brann, M. A. (2019, February). "Motherwisdom": Women's development of evidence through storytelling. Paper panel presentation. Western States Communication Association Annual Conference, Seattle, WA.
25. Head, K. J., **Johnson, N. L.**, & Scott, S. F. (2018, November). Exploring Patient Knowledge and Information Sources about Co-testing (Pap testing + HPV Testing) in At Risk Populations. Paper panel presentation. American Public Health Association Annual Meeting, San Diego, CA.
24. Head, K. J., **Johnson, N. L.**, & Scott, S. F. (2018, April). Communication of Cervical Cancer Screening Results at Federally Qualified Health Centers in Indiana. Panel presentation at Kentucky Conference on Health Communication, Lexington, KY.
23. **Johnson, N. L.**, Parrish-Sprowl, J., & Handayani, S. (2017, June). The role of health literacy in quitting tobacco in Indonesia: A descriptive correlational analysis. Poster Presentation, NIDA International Poster Session, Society for Prevention Research, Washington, D.C.
22. **Johnson, N. L.**, Shields, C., Alexander, S. C., Bair, M., MacKie, P., Huffman, M., & Matthias, M. S. (2017, April). Opioid tapering in patients with chronic pain: A

qualitative study of patient and provider experiences. Poster presentation at the Society of General Internal Medicine Annual Meeting, Washington, D.C.

21. **Johnson, N. L.** (2017, April). Health information-seeking behaviors among patients with type II diabetes: Testing predictors of HISB online and with doctors. D. C. Health Communication Conference, Poster presentation, Fairfax, VA.
20. **Johnson, N. L.**, & Brann, M. A. (2017, March). A preliminary descriptive analysis: Testing acceptance of the Indiana Injury Prevention Resource Guide using the technology acceptance model. Paper presentation. Central States Communication Association Annual Conference, Minneapolis, MN.
19. Shin, Y., **Johnson, N. L.**, & Ryan, K. (2016, November) Effects of Resource Awareness on Indiana Adult Smokers' Intention to Quit Smoking. Poster presentation at American Public Health Association Annual Meeting, Denver, CO.
18. **Johnson, N. L.** (2016, November)."Students in the Community: Exploring the Value of Interdisciplinary Experiential Learning Programs." Panel presentation, National Communication Association Annual Convention, Philadelphia, PA.
17. **Johnson, N. L.**, Harsin, A., Zajac, A., & Parrish-Sprowl, J. (2016, November). How Polish Smokers Decide to Quit: An Examination of the Relationships between Health Literacy and Health Information Seeking Behaviors. Poster presentation, National Communication Association Annual Convention, Philadelphia, PA.
16. **Johnson, N. L.** (2016, November). Learning the Culture of Health among Burmese Americans: An Exploratory Study in Progress. Research-In-Progress presentation, National Communication Association Annual Convention, Philadelphia, PA.
15. **Johnson, N. L.**, Harsin, A., Zajac, A., & Parrish-Sprowl, J. (2016, June). How Polish Smokers Decide to Quit: An Examination of Relationships between Health Literacy and Health Information Seeking Behaviors. Poster Presentation, NIDA International Poster Session, Society for Prevention Research, San Francisco, CA.
14. **Johnson, N. L.** (2016, April). The Next 20 Years of Innovation for Public Debate. Panel presentation. Central States Communication Association Annual Conference, Grand Rapids, MI.
13. Preiss, R., Allen, M., Coffelt, T., Hanasano, L., **Johnson, N. L.**, & Kopaczewski, S. (2016, April). Meta-Analysis Examining the Relationship of Dogmatism/Authoritarianism on Conformity. Paper presentation, Central States Communication Association Annual Conference, Grand Rapids, MI.
12. **Johnson, N. L.** (2016, April). Reflections on Experiential Learning: Stories Told from Both Sides of the Classroom. Panel presentation. Central States Communication Association Annual Conference, Grand Rapids, MI.
11. **Johnson, N. L.** (2015, April). Redefining the Digital Divide: Accounting for Culture in Health Disparities. Paper presentation. Central States Communication Association Annual Conference, Madison, WI. ***Top Paper Panel in Graduate Student Interest Group**
10. **Johnson, N. L.** (2015, April). Can a Competitive Debate Model be a Model for Public Deliberation? Panel presentation. Central States Communication Association Annual Conference, Madison, WI.
9. **Johnson, N. L.**, Shin, Y., & Ryan, K. (2015, April). Examining the Effects of Indiana adults' awareness and attitude toward state smoke-free policy and perception of second-hand smoking on smoking attitude. Poster presentation, D.C. Health Communication Conference, Fairfax, VA.
8. Bergmaier, M. J., & **Johnson, N. L.** (2014, November). Collaborative Paradigms: Evolutionary Steps toward Pedagogical Connections in Competitive Debate, Paper presentation, National Communication Association Annual Convention, Chicago, IL.

7. **Johnson, N. L.** (2013, April). The Monster is Our Soapbox: How Facebook Creates a Dangerous Arena for Advocacy. Paper presentation. Central States Communication Association Annual Conference, Kansas City, MO.
6. **Johnson, N. L.** (2013, April). From Big Brothers/Big Sisters to Emergency Planning: Exploring the Potentials of Service Learning Partnerships with Nonprofit Organizations. Panel presentation. Central States Communication Association Annual Conference, Kansas City, MO.
5. **Johnson, N. L.** (2012, April). 'There's something wrong in this country…': The rhetoric of dissent to Rick Perry's 'Strong' Ad. Paper presentation, Popular Culture Association Annual Meeting, Boston, MA.
4. Bergmaier, M. J., & **Johnson, N. L.** (2011, November). Embracing the Diversity of Voices: Mechanisms for Pedagogical Inclusiveness in a Fragmented Debate Community. Paper presentation. National Communication Association Annual Convention, New Orleans, LA. ***Top Paper in Argumentation and Forensics Division**
3. Rasmussen, K., & **Johnson, N. L.** (2011, May). Mind Your Manners: Students' Perceptions of Teacher Credibility. Paper presentation, Eastern Communication Association Annual Meeting, Washington, D.C.
2. **Johnson, N. L.** (2010, April). They're everywhere! What is to be done about adjuncts in academe? Panel presentation. Central States Communication Association Annual Conference, Cincinnati, OH.
1. **Johnson, N. L.** (2010, April). Deciphering *Criminal Intent* Within a Male-Female Dichotomy. Paper presentation. Popular Culture Association Annual Meeting, St. Louis, MO.

INVITED PRESENTATIONS

2. "Liquid Gold: Lessons from Women and their Support Persons about Breastfeeding in Indonesia", Graduate Student Colloquia, Department of Communication Studies, Ball State University, September 2019
1. "The Power of a Problem: Cultural Differences on Perceptions of Breastfeeding Challenges and Communication Across 3 Islands in Indonesia", International Festival, World Language and Cultures Department, IUPUI, February 2019

PROFESSIONAL ACADEMIC APPOINTMENTS

Patient Safety Research Fellow, 8/19-Present, Richard L. Roudebush VA Medical Center, Indianapolis, IN

Research Assistant (Analysis), 9/18-7/19, Richard L. Roudebush VA Medical Center, Indianapolis, IN

Adjunct Associate Faculty, 8/18-Present, Indiana University School of Medicine, Indianapolis, IN

Adjunct Graduate Online Faculty, 1/18-5/18, University of South Dakota, Vermillion, SD

Statistics Analyst (Consultant), 5/17-9/17, Emplify, Fishers, IN

Graduate Research Assistant, 8/14-5/18, IUPUI, Indianapolis, IN

Director of Debate, 8/13-8/14, Ball State University, Muncie, IN

Adjunct Instructor, 1/10-12/13, Ivy Tech Community College of Indiana, Muncie, IN

Assistant Director of Debate, 8/09-8/13, Ball State University, Muncie, IN

Adjunct Instructor, 8/08-8/09, Georgia Highlands College, Rome, GA

Instructor, 8/07-8/09, Berry College, Rome, GA

Instructor, 5/06-8/07, Ball State University, Department of Correctional Education, Muncie, IN

Adjunct Instructor, 8/05-8/07, Ivy Tech Community College of Indiana, Muncie, IN

Debate Coach (Graduate Assistant), 8/05-5/06, Ball State University, Muncie, IN

Instructor (Graduate Assistant), 8/04-5/06, Ball State University, Muncie, IN

PROFESSIONAL DEVELOPMENT

Conference, IU Health Fairbanks Conference on Clinical Medical Ethics, IUPUI, September 26, 2019

Seminar, Designing and Executing Qualitative Data Collection, ResearchTalk, Inc., Regenstrief Institute Center for Health Services Research, September 23-25, 2019

Seminar, Writing Winning Grant Proposals for NIH Funding, IU School of Medicine, August 27, 2019

Training, “Patient Safety”, National Center For Patient Safety, Office of Veterans Health Administration, July 31-Aug 2, 2019

Seminar, “Culturally Responsive Teaching Learning Community”, Center for the Integration of Research, Teaching & Learning, IUPUI, Fall 2018

Certificate, Introduction to Online Teaching & Learning, University of South Dakota, Spring 2018

Conference, Preparing Future Faculty and Professionals Conference, IUPUI, November 2017, 2018

Preconference, Global Health Leadership Institute, American Public Health Association Annual Meeting, November 2016

Preconference Seminar, Early Careers and Scholarship in Health Communication, National Communication Association, November 2016, Philadelphia, PA

Short Course, Organizing, Analyzing and Coding Qualitative Data: Creating a Path through the Maze, National Communication Association Annual Convention, November 2015, Las Vegas, NV

Seminar, Understanding and Conducting Meta-Analysis, Central States Communication Association Annual Convention, April 2015, Madison, WI

Preconference Seminar, Early Careers and Scholarship in Health Communication, National Communication Association, November 2014, Chicago, IL

Seminar, Assessing First-Year Learners, Ball State University, Fall 2013

Seminar, Teaching First-Year Learners, Ball State University, Fall 2009

INTERPROFESSIONAL EXPERIENCE

Interprofessional Experience Program, IU School of Nursing, Fall 2015 – Fall 2016
As a student in this 1-credit/semester applied intensive 8-week course recurring for 3 semesters, I collaborated with 4 other graduate students from fine arts, nursing and informatics to develop presentations proposing solutions to a given case study in a competitive environment. Case studies included developing a business model for a medication dispensary machine prototype, strategic communication plan for a new lung cancer screening program at Roudebush VA Medical Center (my team presented the winning proposal during Spring 2016), and an intervention to improve safe needle handling practices in Egypt for the World Health Organization.

CULTURAL IMMERSION LEADERSHIP EXPERIENCE

India Field Study (BSU – Chennai, India) 9 credits, December 2013
Faculty Mentor, 10 students
December 27, 2013 – January 4, 2014
Ten students competed at the World Universities Debating Championship and experienced cultural and historical highlights. This excursion was an imbedded element of the *Fall 2013 Debate & Diplomacy: Extending Argumentation Across Cultures Immersive Learning Program* where students learn and teach debate, and compete.

Berlin Field Study (BSU – Berlin, Germany) 9 credits, December 2012
Faculty Mentor, Instructor of Record, 9 students
December 27, 2012 – January 4, 2013
Eight students competed at the World Universities Debating Championship and experienced cultural and historical highlights. This excursion was an imbedded element of the *Fall 2012 Debate & Diplomacy: Extending Argumentation Across Cultures Immersive Learning Program* where students learn and teach debate, and compete.

CCIM China Immersion (BSU – Beijing, Shanghai & Hong Kong) 6 credits
Faculty Co-Mentor, Instructor of Record, 9 students
May 9 – June 21, 2011
Seven undergrad and two grad students focused on a comparative analysis of Chinese written and visual communications during this 6-week excursion. Students evaluated, assessed, and analyzed Chinese written communication, aural/visual communication, and other media messages from a variety of cultural artifacts such as films, television programming, advertisements, textual materials, and other communications directed towards a western audience and the local audience.

COURSE INNOVATIONS

"Leadership in New Media", Ball State University, Summer 2011, 2012, 2013
This 5-week course, funded by Study of the US Institutes for Student Leaders on New Media in Journalism program, hosted 20 students from Malaysia, Philippines and Indonesia each summer, and featured intensive workshops focusing on journalism, new media design, US culture and history, and leadership. I was invited by the Department of Journalism to plan, develop and facilitate the intensive workshop on leadership as instructor of record.

PROFESSIONAL SERVICE

Korean American Communication Association – International Communication Association
Reviewer, 2019
Journal of Pain Medicine
Reviewer, 2018
Health Communication
Reviewer, 2017-present
National Communication Association
Registration Desk Volunteer, 2018
Health Communication Division
Panel Chair, 2017, 2018
Reviewer, Oct. 2016 – present
Applied Communication Division
Panel Chair, 2019
Reviewer, Oct. 2015 – present
American Public Health Association
Health Communication Working Group
Reviewer, 2018, 2019
Panel Moderator, 2017, 2018, 2019
Program Planning Committee member, Nov. 2015 – present
Solicited Panel Coordinator, 2016
"Health Literacy & Chronic Illness Prevention, Early Detection & Management: Improving Health Outcomes with Communication Strategies"
Information Booth Volunteer, 2016, 2017
International Health Section
Welcome Desk Attendant, 2015, 2016
Reviewer, 2019
Maternal and Child Health Section
Reviewer, 2019
National Educational Debate Association, President, 2013 - 2016
Executive Secretary, 2011 – 2012
Central States Communication Association Conference
Health Communication Interest Group
Panel Chair, 2019
Reviewer, 2018, 2019
Argumentation and Forensics Interest Group
Panel Chair, 2015, 2014, 2012, 2010
Interest Group Chair, 2012
Interest Group Vice Chair, 2011
Reviewer, 2013, 2012, 2011

Popular Culture Interest Group
Reviewer, 2012, 2013, 2014
Women's Interest Group
Reviewer, 2011, 2010
Basic Course Interest Group
Reviewer, 2009
Graduate Student Interest Group
Reviewer, 2009
Panel Respondent, 2009

CAMPUS SERVICE

Volunteer, International Graduate Welcome Program, IUPUI
7/2015 – present
Volunteer, program representative, Study Abroad Fair, IUPUI
8/2015
Member, World Tour Initiative Scholarship Committee, BSU
3/2011, 2012, 2013, 2014
Member, Global Programs Interest Group, BSU
8/2010 – 5/2013

COMMUNITY SERVICE

Volunteer (weekly), Boulevard Place Food Pantry, Indianapolis, Indiana
10/2019 – 3/2020
Volunteer Coordinator, Indy's Big Latch On event, Breastfeeding USA – Indianapolis chapter Indianapolis, Indiana
7/2017 - present
Raffle Coordinator, Indy's Big Latch On event, Breastfeeding USA – Indianapolis chapter Indianapolis, Indiana
7/2017 - present
Dinner Service Volunteer (bi-weekly), Wheeler Mission, Indianapolis, Indiana
2/2016 – 7/2019

PROFESSIONAL MEMBERSHIPS

Society for Prevention Research
American Public Health Association
National Communication Association
Central States Communication Association